

DOCUMENT RESUME

ED 074 631

EA 005 093

TITLE An Assessment of Educational Needs for Learners in Florida, 1970.
 INSTITUTION Florida State Dept. of Education, Tallahassee.
 PUB DATE 70
 NOTE 170p.
 AVAILABLE FROM Bureau of Research, Florida Department of Education, Tallahassee, Florida 32304 (Free)
 EDRS PRICE MF-\$0.65 HC-\$6.58
 DESCRIPTORS Academic Achievement; Board of Education Policy; Citizenship Responsibility; Data Analysis; *Demography; Early Experience; *Educational Needs; Educational Planning; *Educational Practice; Family Life Education; Health Education; Job Skills; Language Skills; Program Evaluation; School Districts; Social Attitudes; *Student Needs; Systems Analysis; *Tables (Data)
 IDENTIFIERS *Assessment; Florida

ABSTRACT

This report, part of the Florida Department of Education Educational Needs Assessment Study, identifies eight critical learner needs and the target population most associated with each need. A first section is a selected statistical abstract that describes the Florida population, with a wide variety of information gathered from public and private agencies being provided. The next section sets forth the statistical results of an assessment made of seven perennial objectives -- cardinal principles enumerated by the NEA -- based on strategies developed by the ENAS task force. Following this section is tabulated data from a survey analysis of educational practices in all 67 Florida school districts. The data reveal that Florida education appears to be most relevant for whites, is lodged in the larger community's values and beliefs, and that nonconventional outcomes of education (delinquency, divorce, illegitimacy) have their origins in the community rather than in the schools. The eight critical learner needs are identified in a final section. A related document is EA 004 092. (Author/MLF)

Copies of this document and the companion publication, *Florida Educational Opinion Survey, 1970*, are available from the Bureau of Research, Florida Department of Education, Tallahassee, 32304.

This public document was promulgated at an annual cost of \$4,069.00 or \$2.80 per copy to report the results of Florida's Educational Needs Assessment Study.

ED 074631

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRO-
DUCED EXACTLY AS RECEIVED FROM
THE PERSON OR ORGANIZATION ORIG-
INATING IT. POINTS OF VIEW OR OPIN-
IONS STATED DO NOT NECESSARILY
REPRESENT OFFICIAL OFFICE OF EDU-
CATION POSITION OR POLICY.

an assessment of educational needs for learners in florida

1970

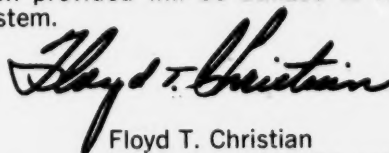


DEPARTMENT OF EDUCATION
TALLAHASSEE, FLORIDA
FLOYD T. CHRISTIAN, Commissioner

EA 005 093

The ultimate goal of education in Florida is to provide educational programs and activities necessary to meet the needs of every learner in the State.

In an effort to determine the extent of these needs, the Department of Education conducted a comprehensive needs assessment study. As a result of this study, eight critical learner needs, and the target populations most associated with each need, were identified. I feel that these identified critical learner needs will provide educators with a sound basis for planning educational programs and activities. As such, I am pleased to present this document as a description of the status of Florida's learner population. I hope that the information provided will be utilized to further improve our education system.

A handwritten signature in black ink, reading "Floyd T. Christian". The signature is written in a cursive style with a large, stylized "F" and "C".

Floyd T. Christian
Commissioner of Education

TABLE OF CONTENTS

	FOREWORD	
	LIST OF TABLES	iii
	LIST OF SOURCES AND SOURCE CODES	viii
I	PROLOGUE	1
	Strategy Implementation	
II	SELECTED CHARACTERISTICS OF FLORIDA'S POPULATION	7
	Growth Residence Race Age Births Mortality Migration Marriage and Divorce Family Size Housing Income Occupation and Employment Education Religion Summary and Conclusions	
III	PERENNIAL OBJECTIVES	43
	Communications and Learning Skills Citizenship Education	

Vocational Interests
 Mental and Physical Health
 Home and Family Living
 Aesthetic and Cultural Appreciation
 Moral and Ethical Values

IV SURVEY OF DISTRICT EDUCATIONAL PRACTICES 78

Description and Definition of Variables
 Input Variables
 Context Variables
 Output Variables
 System Analysis
 Partial Correlations
 Summary and Conclusions

V IDENTIFICATION OF CRITICAL LEARNER NEEDS 100

Critical Need Area One
 Critical Need Area Two
 Critical Need Area Three
 Critical Need Area Four
 Critical Need Area Five
 Critical Need Area Six
 Critical Need Area Seven
 Critical Need Area Eight

VI PROJECTIONS 105

APPENDICES

A. Plan for Study of the Educational Needs of Florida	108
B. FERDC Task Force Members	155
C. Data Review and Evaluation Committee	157

LIST OF TABLES

TABLE	TITLE	PAGE
2.1	Population Growth, 1940-70	7
2.2	Population Density, 1940-70	8
2.3	Florida Counties Exhibiting a Decrease in Population, 1960-70	9
2.4	School Enrollment, 1940-70	10
2.5	Population Distributed by Urban and Rural, 1940-70	11
2.6	Population Distributed by Race, 1940-70	11
2.7	Distribution of Population by Race and Urban/Rural Residence, 1930-70	12
2.8	Distribution of Population by Race and SMSA, 1940-1960-1970	13
2.9	Proportion of Urban/Rural Population by Race, 1940-70	13
2.10	Median Age of Population by Color and Sex, 1930-1970	14
2.11	Age by Urban/Rural Residence and Color, 1970, in Percent	15
2.12	Birth Rate by Color, 1940-70	16
2.13	Median Age of Mothers by Color, 1930-70	16
2.14	Age Adjusted Death Rates by Color, 1950-70	16
2.15	Unadjusted Death Rates by Color and Sex, 1950-70	17
2.16	Infant Mortality by Color, 1940-1970	17
2.17	Maternal Death Rates by Color, 1940-1970	18
2.18	Deaths by Violent Causes by Color, 1950-70	19
2.19	Percent of Florida's Population Five Years of Age and Over That Is Migrant, by Type of Residence, 1970	20
2.20	Distribution of Florida's Migrant Population by Type of Residence Moved to, 1970	21
2.21	Florida's Movers and Migrants: 1st and 2nd Highest Movers by Age Groups, Color and Sex, 1960	22
2.22	Marital Status by Sex, 1930-70	23
2.23	Percent Marital Status by Sex and Color, 1970	24
2.24	Percent Marital Status by Place of Residence and Sex, 1970	25

TABLE	TITLE	PAGE
2.25	Marriage Rates by Color, 1970	26
2.26	Divorce Rates, 1940-1970	26
2.27	Divorces Involving Minor Children, 1969	26
2.28	Size of Family: Percent of Families with Children under 18 Years of Age by Type of Residence, 1960	27
2.29	Families with Children Under 18 Years of Age by Color, by Number of Children, 1960	27
2.30	Head of Household and Presence of Spouse by Color and by Sex, 1960	28
2.31	Characteristics of Housing by Place of Residence, 1970	30
2.32	Characteristics of Housing — Negro, 1970	31
2.33	Median Income of Persons 14 Years of Age and Over by Place of Residence, Color and Sex, 1960	32
2.34	Family Income by Color, 1970	32
2.35	Median Education by Income Level and Sex, 1960	33
2.36	Median Personal Income by Years of School Completed and Sex for Florida, 1960	34
2.37	Trends in Occupational Groups of Employed Persons by Sex in Percent, 1940-70	35
2.38	Rank Order of Occupational Participation and Median Earnings of Employed Persons by Sex and Color, 1970	36
2.39	Trends in Industry Group of the Employed, 1940-70	37
2.40	Rank Order of Participation in Industry Group of the Employed by Sex and Race, 1970	38
2.41	Unemployment Rate As Percent of Total Labor Force by Color, 1970	38
2.42	Unemployment Rate, as A Percent of Total Labor Force, by Sex and Color for Florida, 1940-70	39
2.43	Teenage Unemployment, As A Percent of Total Unemployment, (age 16-19) for 1968	39
2.44	Percent of Persons 5 to 24 Years Old Enrolled In School, 1930-70	39
2.45	Percent of Population 5 to 34 Years of Age Enrolled in School by Color, 1970	40
2.46	Percent of Population Enrolled in School by	40

TABLE	TITLE	PAGE
2.47	Age and Place of Residence, 1970	41
3.1	Religious Affiliation, 1968	43
3.1	Approximate Percent of Students Falling <i>Below</i> the 50th Percentile on the Aptitude Por- tion of the Statewide Ninth Grade Test, 1968- 69, 1969-70	43
3.2	Mean Performance on Each Test of the Florida Statewide Ninth Grade Test by Age and Sex, 1967-68	45
3.3	Correlations Between Performance on Each Test of the Florida Statewide Ninth Grade Test and School Size, 1967-68	47
3.4	Equivalent Mean Scaled Scores for All Seniors on the Aptitude Test of the Florida Statewide 12th Grade Testing Program, Fall 1963 through Fall 1970	48
3.5	Percent of Selective Service Draftees Failing Preinduction and Induction Mental Tests, 1962-1970	48
3.6	Status of Selective Service Draftees Examined for Military Service, 1970	50
3.7	Percent Illiterate, 1910-1970	51
3.8	Percent of Population Completing Selected School Years, 1940-1970	51
3.9	Percent of Population Completing Selected School Years by Color for the U.S. and Florida, 1970	51
3.10	Percent of Population Completing Selected School Years by Sex and Color, 1970	52
3.11	Percent of Population Completing Selected School Years by Place of Residence, 1970	52
3.12	Foreign Language Enrollment in Florida Public Schools, 1969-70	53
3.13	Non-Promotion in Florida Public Schools by Grade Level for Selected School Years	54
3.14	Non-Promotion by Grade Groupings and Race, 1960-61	55
3.15	Percent of Florida High School Graduates Par- ticipating in Post-Secondary Education or Training, 1962-1970	56
3.16	Percent of Eligible Voters Who Voted in the 1968 Presidential Election	57

TABLE	TITLE	PAGE
3.17	Percent of Persons in Florida of Voting Age Who Were Registered to Vote by Color, 1950-1970	58
3.18	Number and Percent of Enrollees in Vocational Education Programs by Level of Enrollment and Occupational Class, 1970	59
3.19	Follow-up of Enrollees in Preparatory Vocational Programs, 1970	60
3.20	Rate and Rank of Selected Diseases by Color, 1970	61
3.21	Rate and Rank of Selected Diseases by Color, 1960	62
3.22	Venereal Disease, by Type and Age Group of Highest Incidence, 1970	64
3.23	Enrollment in Specialized Health Courses, 1969-70	64
3.24	Alcohol and Narcotic Referrals by Sex and Color, 1962, 1967, 1970	65
3.25	Dependency Referrals to Florida Juvenile Courts by Reason, Color and Sex, in Percent, 1970	66
3.26	Percent Increase in Dependency Referrals by Color and Sex, 1960-1970	66
3.27	Percentage of Florida's Population Receiving Aid from the State Welfare Board, 1940-1970	67
3.28	Florida Families Receiving Assistance Through the Aid to Dependent Children Program, 1940-1970	67
3.29	Percent of Children Under 18 From Low Income Families, 1970	67
3.30	Crime Rates by Type of Crime, 1950-1970	69
3.31	SMSA Crime Rates by Type of Offense: 1970	70
3.32	Percent of 10-17 Year Old Referred to Juvenile Courts, 1960-1970	71
3.33	Percent Increase in Juvenile Delinquency Referrals by Sex and Race, 1960-1970	71
3.34	The Ten Most Frequent Reasons for Referral to Juvenile Court Classified as Delinquency as Percent of Total Referrals by Race and Sex, 1960	72

TABLE	TITLE	PAGE
3.35	The Ten Most Frequent Reasons for Referral to Juvenile Court Classified as Delinquency as Percent of Total Referrals by Race and Sex, 1970	73
3.36	Traffic Violation Referrals by Race and Sex, 1960-1970	74
3.37	Referrals Previously Known to the Juvenile Courts, 1961, 1964, 1967	75
3.38	Illegitimate Births as Percent of Live Births, 1930-1970	76
3.39	Illegitimacy Among Florida Teenagers (19 years of age and under) by Color as Percent of All Illegitimate Births, 1952-1970	77
4.1	System Variables	79
4.2	Input Intercorrelations	83
4.3	Context Intercorrelations	85
4.4a	Output Intercorrelations	86
4.4b	Output Intercorrelations	87
4.4c	Ninth Grade Standardized Test Intercorrelations, 1969-70	88
4.5	Input vs. Context	90
4.6a	Input vs. Conventional Output	92
4.6b	Input vs. Nonconventional Output	93
4.7a	Context vs. Conventional Output	95
4.7b	Context vs. Nonconventional Output	96
4.8	The Association Between Input and Output After Controlling for Context: Selected Partial Correlations	98

LIST OF SOURCES AND SOURCE CODES

SOURCE CODE	SOURCE
BOC-1	United States Department of Commerce, Bureau of the Census, <i>Number of Inhabitants</i> , PC(1)-A11, Florida
BOC-2	United States Department of Commerce, Bureau of the Census, <i>General Population Characteristics</i> , PC(1)-B11, Florida
BOC-3	United States Department of Commerce, Bureau of the Census, <i>General Social and Economic Characteristics</i> , PC(1)-C11, Florida
BOC-4	United States Department of Commerce, Bureau of the Census, <i>Housing Characteristics for States, Cities, and Counties</i> , HC(1)-A, Florida
BOC-5	United States Department of Commerce, Bureau of the Census, <i>Statistical Abstract of the United States</i>
DHRS-1	Department of Health and Rehabilitative Services, Division of Health, <i>Florida Vital Statistics</i>
DHRS-2	Department of Health and Rehabilitative Services, Division of Health, <i>Florida Morbidity Statistics</i>
DHRS-3	Department of Health and Rehabilitative Services, Division of Youth Services, <i>Florida Juvenile Court Statistics</i>
DHRS-4	Department of Health and Rehabilitative Services, Division of Family Services, <i>Annual Statistical Report</i>
DOE-1	Department of Education Reports
DOE-2	Department of Education, Bureau of Curriculum and Instruction

DOE-3	Department of Education, Division of Vocational, Technical and Adult Education
DOE-4	Department of Education, Bureau of Planning and Evaluation, Accreditation Section
DOE-5	Department of Education, Division of Elementary and Secondary Education, Bureau of Research, Research Report No. 89
DOE-6	Department of Education, Division of Elementary and Secondary Education, Bureau of Research, Research Report No. 90
DOE-7	Department of Education, Division of Elementary and Secondary Education, Bureau of Research, Research Report No. 99
ETS	University of Florida, Cooperative Test Division, Educational Testing Service, Technical Report No. 150-00-9.
FBI	Federal Bureau of Investigation, Uniform Crime Reports, <i>Crime in the United States</i>
FCC	Florida Council of Churches
FSA	Bureau of Economic and Business Research, University of Florida, <i>Florida Statistical Abstract</i>
NGTS	Florida State University, College of Education, Ninth Grade Testing Service, Technical Report No. 5-68
ROS	National Education Association, Research Division, <i>Rankings of the States</i>
OSS	State of Florida, Office of the Secretary of State
DLE	State of Florida, Department of Law Enforcement, <i>Crime in Florida</i>

CHAPTER I

PROLOGUE

"The State Plan shall identify the critical educational needs of the State as a whole and the critical educational needs of the various geographic areas and population groups within the state, and shall describe the process by which such needs were identified. The process shall be based upon the use of objective criteria and measurements and shall include procedures for collecting, analyzing and validating relevant data and translating such data into determinations of critical educational needs."

*Section 118.8, U.S. Office
of Education regulations for
ESEA Title III Programs.*

This requirement to prepare a state plan to meet identified needs was given the Florida Department of Education in 1968 when the responsibility for administering Title III at the state level was transferred from the U.S. Office of Education to the individual state departments of education. It was immediately realized that this plan would be basic to the proper implementation of the Title III program—indeed, to the proper understanding of the direction the entire educational effort of the state should take. The purpose of the Elementary and Secondary Education Act is clear. Public Law 90-247 spells this out in Section 303 where it is stated that assistance will be made available to states for:

- "(1) planning for and taking other steps leading to the development of programs or projects designed to provide supplementary educational activities and services described in paragraphs (2) and (3) including pilot projects designed to test the effectiveness of plans so developed;**
- (2) the establishment or expansion of exemplary and innovative educational programs . . . for the purpose of stimulating the adoption of new educational programs . . . in the schools of the State; and**
- (3) the establishment, maintenance, operation and**

expansion of programs or projects . . . designed to enrich the programs of local elementary and secondary schools and to offer a diverse range of educational experience to persons of varying talents and needs by providing, especially through new and improved approaches, supplementary educational services and activities . . ."

*Public Law 90-247,
Section 303.*

It is obvious that a program of this scope must be based on a thorough knowledge and understanding not only of what is actually going on in the educational enterprise but what one would like to see derived from it. In short, what is needed is what Dr. Roger Kaufman has described in such deceptively simple terms as the discrepancy that exists between "what is" and "what ought to be".¹ Accepting this concept, the Department of Education set about the task of establishing the "what is" of needs assessment.

However, this presented a formidable challenge to those responsible for the needs assessment activity. Florida is unique; its tremendous and continuing growth, a national phenomenon, has resulted in a heterogeneous population, a considerable variation in the quality of education at the local level, as well as in the ability and willingness of local districts to support their schools adequately. How has this diversity affected the output of the educational system as measured by its adult product? Even finding the answers to this question presented difficulties. Florida has a highly mobile population. As of 1970, 21 percent of its residents had moved in from other states since 1965. Another 41 percent had changed their place of residence within the state in the same five-year period.² Such extreme and characteristic mobility not only underscored the importance of the needs assessment but led to some basic decisions about the study itself. The most important was that for the purpose of determining needs, Florida must be considered a closed system. That is, what are the educational problems and unmet needs in Florida **as it exists today** to which the school system could direct its energies most meaningfully?

Equally important, a position was taken that whatever strategies were chosen for the assessment, they must be based not only on the most current educational thinking in the area but must as well incorporate the thinking of the wide variety of formal

¹Swanson, James R., "Need Assessment: First Step to Real Answers," *Florida Schools*, 31 (November-December 1968), pp 6-8.

²Florida State Chamber of Commerce report in the *Florida Times Union*, July 30, 1972.

educational interests in the state. At the same time, however, it was also felt that the Florida Department of Education should assume as much responsibility for implementing the actual processes of assessment as its resources would permit. With these preliminary decisions made, actual planning for the needs assessment could proceed.

STRATEGY

It was obvious that the scope of the undertaking called for outside counsel and guidance. Early in 1968, the Florida Educational Research and Development Council (FERDC) was asked to assemble and supervise a special task force to provide this assistance. It consisted of representatives of the full spectrum of educational interests in the state whose responsibility was to prepare a detailed plan for a study of educational needs of Florida. In response to this request, 19 outstanding educators were recruited by FERDC. They were experienced, professional educators, many widely known in the fields of educational theory and research representing both public and private schools, public and private universities, the U.S. Office of Education and the Florida Department of Education.

This task force held two lengthy sessions from which emerged the outline for a comprehensive, multi-strategy survey, entitled **Plan for Study of the Educational Needs of Florida**. (A copy of the plan may be found in Appendix A; a list of task force members in Appendix B.) The plan was accepted by the State Board of Education in June, 1968. Shortly afterward, it was initiated by the Department of Education and from that point on has served as the primary guide for the state's assessment effort.

The plan suggested three strategies to produce the necessary information that the task force considered essential to an understanding of the educational needs of the state. These were:

- (1) A review and secondary analysis of state and district socioeconomic, ethnic, and educational data already accessible to the Department of Education from a variety of public and private agencies;
- (2) An original survey of educational practices and learner characteristics of a random sample of Florida schools; and
- (3) An original sampling of the opinions of certain specified sub-populations within the state.

To give direction to these data collection activities, three

sets of sixty to seventy similarly worded questions were formulated covering the seven broad areas of behavior listed below:

Communication and Learning Skills
Citizenship
Vocational Interests
Mental and Physical Health
Home and Family Relationships
Cultural and Aesthetic Appreciation
Moral and Ethical Values

These broad areas, identified by the task force as perennial objectives, corresponded very closely to the Seven Cardinal Principles of Education authored by the National Education Association in 1918.

The questions ranged over a wide variety of topics—demographic, social, and economic, as well as educational, with the greatest emphasis on the first three areas. Few of the questions were actually focused on school achievement *per se*. The members of the task force made a special effort, in formulating questions with this emphasis, to insure that the assessment would be particularly sensitive to the nonacademic needs of learners. Too often, it was felt, this kind of need tends to be overlooked by the school system in its concern for more strictly academic problems of students.

Five types of information were to be produced as a result of implementing the three research strategies previously mentioned:

- (1) A description of the status of Florida learners in seven broad areas of behavior pertinent to the state's educational interests.
- (2) A statement of the critical educational needs of Florida learners in the context of these behavioral areas.
- (3) A description of population characteristics most highly correlated with the incidence of each critical need.
- (4) An evaluation of the effect which certain selected system inputs have on each critical need.
- (5) An analysis of the attitudes and opinions which certain "educationally relevant" subpopulations hold toward education.

All five types of information were seen by the task force as necessary to place the Department on firm ground in future efforts to deal with identified needs.

IMPLEMENTATION

Shortly after implementing the plan, an administrative decision was made in the Department of Education to replace temporarily the survey of educational practice and learner characteristics of Florida schools with a more limited one of district practices. Among the reasons was that the substitute activity could be organized around existing data, eliminating the need for a field survey. Care was taken, however, that the new activity, although at a different level of analysis, would serve essentially the original purpose. It became a pilot activity on which the more extensive and complex state school practices survey could be implemented later. A further decision was made, because of the magnitude of the undertaking, to limit the target of assessment to public school students, K-12.

The overall effort, however, did meet with better than average success. The result was an overwhelming amount of raw data pertaining to the Florida school system. The question of analysis of this data, therefore, was crucial. The task force had foreseen this contingency and had set general guidelines, including the creation of an evaluation panel to determine the areas of critical needs and the degree of their criticality.

When the panel was organized, it accepted the guidelines of the task force with only minor changes. (A list of the evaluation panel members can be found in Appendix C.) It did, however, establish its own criteria for determining criticality. A need was to be considered critical when:

- (1) The difference between goal and status was too great to be attributable to chance;
- (2) The amelioration of the need was seen as vital to the achievement of any one of the Department of Education's long-range objectives (goals); and
- (3) The need was selective, i.e., it was found to be more highly associated with certain segments of the learner population than others.

The initial identification of a need was generally based upon the evidence of an observed difference between the distribution of a certain learner characteristic in the state's population (or in some subpopulation) and a "norm." This norm was usually a comparable national, state or subpopulation value seen by the panel as applicable.

Two types of data entered into the panel's specification of need-susceptible target populations; *first*, observed excessive differentials between status and goal for specific subpopulations

and, *second*, the results of a special correlation analysis carried out in conjunction with the survey of district practices (see **Chapter IV**).

The method of evaluating the effectiveness of district practices was based largely on a partial correlation analysis. Here the panel decided whether or not a meaningful amount of variance in learner performance could still be attributed to systems inputs after the effect of non-educational factors had been removed. Using these techniques, the panel identified critical needs in the broad behavioral areas established by the task force, and 11 need-susceptible target populations.

CHAPTER II

SELECTED CHARACTERISTICS OF FLORIDA'S POPULATION

Florida is a many-faceted state. A land of sunshine, beaches, palms and leisure. Northern counties with a plantation background. A subtropical south that is one of the fastest-growing areas in the country. Great agricultural resources. Metropolitan centers with all the urban problems. Florida is a state of diversity and contrasts. Florida is also people. This section presents a selection of data about the people of Florida and their characteristics.

GROWTH

The rapid growth exhibited by Florida's population for the past three decades has been little short of explosive. Table 2.1 shows that in 30 years Florida has risen from the nation's 27th largest state to its ninth. During this period the rate of population growth has consistently exceeded that of the nation as a whole and in 1960, Florida ranked first in the rate of growth with an increase of 78.7 percent in the 1950-60 decade.

During the 1960-70 decade the absolute increase was 1,637,883. This was less than the 2,180,255 of the preceding decade and, with a larger base, the rate of increase fell to 37.1

Table 2.1. **POPULATION GROWTH, 1940-1970**

Year	Population	Florida Ranking Among States	Florida Percent Increase	Florida Percent Increase Rank Among States	U.S. Percent Increase
1970	6,789,443	9	37.1	2	13.3
1960	4,951,560	10	78.7	1	21.9
1950	2,771,305	20	46.1	5	21.5
1940	1,897,414	27	—	—	20.8

Source Code: BOC-1 1970, FSA, 1968

percent—second in the nation. However, the Bureau of Population Studies of the University of Florida foresees a continued population growth for the state while a national study¹ places Florida's estimated population at 7,101,000 in 1972. The study also predicts that the state's population will have grown to some 8,135,000 persons by 1977 and to 9,447,200 persons by 1982.

As Florida grows, it is rapidly becoming one of the nation's more densely populated states. During the period 1940-70, it moved from 32nd in population density to 14th. The 1970 census showed Florida had over twice as many residents per square mile as the national average. Table 2.2 shows these 30-year comparisons.

Table 2.2. **POPULATION DENSITY, 1940-1970**

Year	Florida Person/Sq.Mi.	Ranking Among States	U.S. Person/Sq.Mi.
1970	123.0	14	57.0
1960	91.5	18	50.5
1950	51.5	28	42.9
1940	35.0	32	44.5

Source Code: BOC-1 1970, FSA 1968, ROS 1970

Florida's growth has not been uniform. As the state was experiencing its greatest overall rate of population expansion (1950-60), twelve of its more rural counties lost population. In the following decade (1960-70), while the state as a whole continued substantial growth, six counties exhibited a decrease in population. These counties, with their urban/rural percent, are shown in Table 2.3.

For the state as a whole, however, rapid growth has been more than matched by a spectacular expansion in school enrollment. Table 2.4 shows enrollment and rate of increase by three grade-level combinations at ten-year intervals from 1939-40 to 1969-70. Note that in two of these decades increases in school enrollment exceeded the general population increases shown in Table 2.1.

¹1972 Kiplinger Forecast of Florida Growth from The Kiplinger Washington Editors

Table 2.3.

**FLORIDA COUNTIES EXHIBITING A DECREASE IN
POPULATION 1960-1970**

County	Percent Decrease	Percent Urban
Flagler	-2.5	0.0
Gadsden	-6.7	41.5
Holmes	-1.1	0.0
Jackson	-4.9	27.0
Jefferson	-8.0	0.0
Madison	-4.8	27.7

Source Code: BOC-1, 1970

RESIDENCE

Florida's increasing and rapid urbanization is illustrated in Table 2.5 which describes the urban/rural distribution of the state's population. Figures for the nation as a whole are given for 1970 as a basis for comparison. In 1970, approximately four out of five Florida residents were in urban areas, somewhat above the national average.

RACE

The distribution of Florida's population by race is given in Table 2.6. This shows that the percent of minority races other than black is fractional. While the percent of blacks to whites in Florida exceeds the national average, this difference is diminishing as the percent of blacks in the national population increased between 1940 and 1970 while the percent of blacks in the Florida population decreased from 27.1 percent in 1940 to 15.5 percent in 1970.

Table 2.4. SCHOOL ENROLLMENT, 1940-1970

School Year	K-6		Grade Level 7-12		K-12	
	Number	Percent Increase From Previous Decade	Number	Percent Increase From Previous Decade	Number	Percent Increase From Previous Decade
1969-1970	863,549	40.82	687,790	68.89	1,551,339	52.02
1959-1960	613,226	101.92	407,235	131.91	1,020,461	112.91
1949-1950	303,686	25.00	175,593	20.98	479,279	23.50
1939-1940	242,936	—	145,131	—	388,067	—

Source Code: DOE-1

Table 2.5. **POPULATION DISTRIBUTED BY URBAN AND RURAL, 1940-1970 (In Percent)**

Year	Urban	Rural	
		Nonfarm	Farm
Florida			
1970	80.5	17.3	2.2
1960	74.0	23.9	2.1
1950	65.5	26.1	8.4
1940	55.1	29.0	15.9
United States			
1970	73.5	26.5	

Source Code: BOC-2 1970

Table 2.6. **POPULATION DISTRIBUTED BY RACE, 1940-1970 (In Percent)**

Year	White		Negro		Other	
	U. S.	Fla.	U. S.	Fla.	U. S.	Fla.
1970	87.4	84.1	11.2	15.5	1.4	0.4
1960	88.6	82.1	10.5	17.8	0.9	0.1
1950	89.3	78.1	9.9	21.8	0.8	0.1
1940	89.6	72.9	9.7	27.1	0.7	(1)

Source Code: BOC-3 1970

¹Rounded to less than one-tenth of one percent

The marked urbanization of Florida illustrated by Table 2.5 shows some significant variations when race is considered. The following three tables (Tables 2.7, 2.8 and 2.9) combine racial and urban-rural trends to bring out these variations.

Table 2.7 shows that Florida's white and Negro residents were not being urbanized at the same rate. Negroes tend to move from rural to urban areas more rapidly than whites. The second table (Table 2.8) shows, however, that while Negroes were concentrating in urban areas at a faster rate, they were less likely than whites to select the larger metropolitan centers.

Table 2.7. DISTRIBUTION OF POPULATION BY RACE AND URBAN/RURAL RESIDENCE, 1930-1970 (In Percent)

Year	White		Negro		Indian		Other	
	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
1970	80.2	19.8	82.5	17.5	66.7	33.3	85.8	14.2
1960	73.4	26.6	76.4	23.6	40.9	59.1	73.5	26.5
1950	65.4	34.6	65.6	34.4	18.5	81.5	72.1	27.9
1940	54.9	45.1	55.8	44.2	5.2	94.8	71.1	28.9
1930	53.1	46.9	48.7	51.3	4.1	95.9	65.3	34.7

Source Code: BOC 3 1970

Table 2.8. **DISTRIBUTION OF POPULATION BY RACE AND SMSA¹, 1940-1970 (In Percent)**

Year	White		Negro	
	Inside	Outside	Inside	Outside
1970	85.7	14.3	68.0	32.0
1960	66.8	33.2	60.1	39.9
1940	36.7	63.3	28.7	71.3

Source Code: BOC-3 1970

¹Standard Metropolitan Statistical Area

The third table (Table 2.9) shows that despite more rapid urbanization of Negroes in Florida, the effect on the racial percentages of urban areas was more than negated by the reduction in the percent of Negroes in the state's overall population as shown by Table 2.6.

Table 2.9. **PROPORTION OF URBAN/RURAL POPULATION BY RACE, 1940-1970 (In Percent)**

Year	White		Negro	
	Urban	Rural	Urban	Rural
1970	83.9	85.8	15.7	13.8
1960	81.5	78.2	18.4	21.0
1950	78.1	73.2	21.8	26.7
1940	72.5	66.2	27.4	33.7

Source Code: BOC-3 1970

AGE

The image of Florida as primarily a residence for older and retired persons is not born out by Tables 2.10 and 2.11. Table 2.10 shows that in 1970 the median age for Floridians was approximately 32 years. The median age, however, has been rising for whites while taking a downward turn for nonwhites in 1970. The median age for nonwhites was 13.1 years less than for the white population. One explanation for this is the higher birth rate of nonwhites coupled with their higher death rate in the middle and upper age brackets.

Table 2.10. **MEDIAN AGE OF POPULATION BY COLOR AND SEX, 1930-1970** (In Percent)

Color/Sex	Year				
	1970	1960	1950	1940	1930
State	32.3	31.2	30.9	28.9	25.8
Male	30.4	30.3	30.6	29.1	26.4
Female	34.2	32.0	31.2	28.7	25.3
White	34.8	33.1	32.0	30.3	26.5
Male	32.7	32.1	31.5	29.9	26.8
Female	36.8	33.9	32.5	30.0	26.2
Nonwhite	21.7	23.0	27.2	26.7	24.6
Male	20.4	22.7	27.2	27.3	25.5
Female	22.8	23.3	27.2	26.1	23.8

Source Code: BOC-2 1970

Comparison of the urban and rural categories (Table 2.11) indicates there is a disproportionately large group of younger persons, 19 and under, in the rural areas, with the largest proportion in the rural farm areas being found between ages 5 and 19. There is a somewhat lower proportion of persons under age 5 in rural farm areas, possibly reflecting the out-migration of persons between ages 20 and 29, the primary child-bearing period.

BIRTHS

The overall birth rate for Florida rose steadily between 1940 and 1960, then declined sharply by 1970 (Table 2.12). Of particular interest is the increasing differential in rates for whites and nonwhites during this period. In 1940 the nonwhite birth rate exceeded that for whites by approximately 1.5 per thousand population. In 1970 the difference had increased approximately five times, making the differential of nonwhites over whites almost ten per thousand population.

Table 2.11. AGE BY URBAN/RURAL RESIDENCE AND COLOR, 1970, (In Percent)

Age	Rural										Totals					
	State			Urban			Non Farm			Farm			Urban	Non-Farm	Farm	
	W ¹	NW ²		W	NW		W	NW		W	NW					
Under 5	6.7	11.1		6.4	11.2		7.9	10.8		6.8	9.5		7.4	7.2	8.3	7.2
5-9	8.2	12.6		8.0	12.5		9.3	13.2		8.6	12.8		8.9	8.7	9.8	9.2
10-14	8.8	13.1		8.6	12.9		9.7	14.4		10.3	14.1		9.5	9.3	10.3	10.9
15-19	8.1	10.6		8.1	10.4		8.2	11.5		9.0	13.0		8.5	8.4	8.6	11.3
20-24	7.3	7.6		7.4	7.7		7.0	6.8		5.6	5.8		7.3	7.4	7.0	5.6
25-29	5.9	6.0		5.8	6.2		6.4	5.0		5.1	4.5		5.9	5.9	6.2	5.1
30-34	5.2	5.8		5.1	6.0		5.5	5.0		5.0	3.9		5.3	5.3	5.4	4.9
35-39	5.2	5.4		5.2	5.5		5.2	5.0		5.3	4.4		5.2	5.3	5.1	5.2
40-44	5.9	5.2		5.9	5.3		5.5	4.8		5.9	4.9		5.8	5.9	5.4	5.7
45-49	6.0	4.6		6.2	4.7		5.3	4.5		6.2	5.1		5.8	5.9	5.2	6.0
50-54	5.6	4.3		5.7	4.3		5.1	4.0		6.7	5.4		5.4	5.5	4.9	6.5
55-59	5.3	3.9		5.4	3.8		5.1	3.8		6.6	4.8		5.1	5.1	4.9	6.4
60-64	5.7	3.3		5.6	3.2		5.7	3.4		6.5	3.9		5.3	5.2	5.4	4.8
65+	16.1	6.5		16.6	6.3		14.2	7.7		12.5	7.7		14.6	14.9	13.3	11.7
Median	34.8	21.7		35.6	22.0		31.5	20.0		34.6	20.4		32.3	32.9	29.8	32.5

Source Code: BOC-3 1970

¹White

²Nonwhite

Table 2.12. **BIRTH RATE BY COLOR, 1940-1970¹**

Color	1970	1960	1950	1940
Florida Total	16.8	23.1	22.8	17.6
White	15.1	20.6	20.7	17.0
Nonwhite	26.0	34.9	30.5	19.1

Source Code: DHRS-1
¹Births/1,000 population

The median age of mothers, by color, appears in Table 2.13. For each of the periods reported, the median age of nonwhite mothers tended to be lower than for white mothers.

Table 2.13. **MEDIAN AGE OF MOTHERS BY COLOR, 1930-1970**

Color	1970	1960	1950	1940	1930
White	24.1	24.9	25.8	25.2	25.7
Nonwhite	22.4	24.3	24.3	23.5	23.8

Source Code: DHRS-1

MORTALITY

Table 2.14 compares the death rates adjusted for proportionate age groups, for white and nonwhites. For the period reported, 1950-1970, the death rates of nonwhites persistently exceeded those for whites. While death rates for both groups declined, the gap between the races remained fairly constant.

Table 2.14. **AGE ADJUSTED DEATH RATES BY COLOR, 1950-1970¹**

Color	1970	1960	1950
Florida Total	7.0	7.3	8.3
White	6.4	6.5	7.2
Nonwhite	11.1	11.2	12.7

Source Code: DHRS-1
¹Deaths per 1,000 population

Table 2.15 provides death rates by race and sex. Noteworthy is the relationship of white and nonwhite with respect to rates by sex. The death rate for males in both groups continued to remain higher than those for females. In 1970, the rate increased in all categories, except for nonwhite females.

Table 2.15. **UNADJUSTED DEATH RATES BY COLOR AND SEX, 1950-1970¹**

Color/Sex	1970	1960	1950
Florida Total	10.9	9.6	9.4
White			
Male	13.6	11.8	10.8
Female	8.7	7.2	9.8
Nonwhite			
Male	12.2	11.8	13.5
Female	8.1	8.6	9.7

Source Code: DHRS-1

¹Deaths per 1,000 population

Florida has made advances in the reduction of infant mortality among both whites and nonwhites but Table 2.16 shows that the difference between the races is still wide and appears to be widening. Since 1940 the nonwhite infant mortality rate has continued to be almost twice as great as the rate for white infants.

Table 2.16. **INFANT MORTALITY BY RACE, 1940-1970¹**

Color	1970	1960	1950	1940
Florida Total	21.4	29.7	32.3	53.8
White	17.7	23.6	26.8	44.2
Nonwhite	32.9	46.1	45.7	76.8

Source Code: DRHR-1

¹Deaths per 1,000 live births.

Even more striking is the reduction in the maternal death rate (Table 2.17). The rate has been reduced from an overall 60.5 deaths per 10,000 live births in 1940 to 3.0 in 1970. The rate for nonwhite mothers has improved even more markedly from 99.7 per 10,000 live births in 1940 to 3.6 in 1970.

Table 2.17. **MATERNAL DEATH RATES BY COLOR, 1940-1970¹**

Color	1970	1960	1950	1940
Florida Total	3.0	5.0	12.9	60.5
White	2.4	2.0	7.4	44.7
Nonwhite	5.0	13.1	26.2	99.7

Source Code: DHRS-1

¹Deaths per 10,000 live births.

Deaths by violence (Table 2.18, next page) show marked differences between whites and nonwhites. The rate for nonwhites is greater in all categories except suicide and self-inflicted injury, in which it is less than one-third. The opposite is the case in accidental deaths (excluding motor vehicular accidents) and is most marked on homicides. In this category the nonwhite rate is 8.6 times larger than that of whites.

MIGRATION

Florida has a highly mobile population. Table 2.19 shows that 46.6 percent of those living in the state in 1970 resided in a different state, county or country in 1965. More than a quarter (25.2 percent) moved from another county. Almost one in five (18.5 percent) came from another state. Another 2.9 percent came in from outside the U.S. Caution is necessary in interpreting these figures. The definition of "migrant" used in these tables is different from that usually referred to as migrant worker population. As used here it is more synonymous with "movers" as is used for intrastate and intracounty change of residence.

Table 2.20 and Table 2.21 examine in more detail this migrant population which is one of the marked characteristics of

Table 2.18. DEATHS BY VIOLENT CAUSES BY COLOR, 1950-1970¹

Type	1970			1960			1950		
	Total	W	NW	Total	W	NW	Total	W	NW
Accidents	58.0	54.2	80.6	57.4	52.6	79.2	68.7	64.1	85.2
Excluding motor vehicular	29.7	26.5	48.5	32.7	29.2	48.7	38.0	33.8	53.0
Motor Vehicular only	28.4	27.7	32.1	24.6	23.4	30.5	30.7	30.3	32.2
Homicide	12.6	6.0	51.7	9.0	3.6	33.8	13.1	4.3	44.6
Suicide & Self Inflicted Injury	13.7	15.3	4.2	13.4	15.5	3.9	11.4	13.7	3.1

Source Code: DHRS-1

¹Deaths per 100,000 Population

Table 2.19. PERCENT OF FLORIDA'S POPULATION FIVE YEARS OF AGE AND OVER THAT IS MIGRANT BY TYPE OF RESIDENCE, 1970

Residence in 1965	Residence in 1970					
	State	Urban	Rural		SMSA	
			Total	Nonfarm	Farm	Inside Outside
In diff. county in state	25.2	24.8	26.4	27.6	17.4	24.0 27.8
In diff. state	18.5	18.9	16.4	18.5	8.7	18.2 19.0
Total	43.7	43.7	42.8	46.1	26.1	42.2 46.8
Abroad	2.9	3.3	1.0	1.1	0.5	3.6 1.3
Grand Total	46.6	47.0	43.8	47.2	26.6	45.8 48.1

Source Code: BOC-3 1970

Table 2.20. DISTRIBUTION OF FLORIDA'S MIGRANT POPULATION BY TYPE OF RESIDENCE MOVED TO, 1970
(In Percent)

Residence in 1965	Number	Rural			SMSA	
		Total	Nonfarm	Farm	Inside	Outside
In diff. county in state	1,582,068	20.3	18.8	1.5	65.4	34.6
In diff. state	1,161,068	17.4	16.3	1.1	67.6	32.4
Total	2,743,136	19.1	17.7	1.3	66.3	33.7
Abroad	181,084	6.6	6.2	0.4	85.5	14.5
Grand Total	2,924,220	18.3	17.0	1.3	67.5	32.5

Source Code: BOC-3 1970

Florida. Table 2.20 breaks down these movers into urban/rural and SMSA residency categories. Approximately four in five of those who moved from one county to another chose urban areas while an even higher percent of those coming from another state (82.6 percent) became urban residents. Only 17.7 percent of the total found homes in rural nonfarm areas while 1.3 percent are classified as rural farm.

Table 2.21 is a breakdown of migrants and movers age 20 and over, by race and sex. Taken together the tables show the tremendous volume of in-migration and change of residence among Floridians contributing to a highly mobile population. Table 2.21 also shows a comparison of age groups, sex and race to distance moved using information gathered from the 1960 census.²

Table 2.21. **FLORIDA'S MOVERS AND MIGRANTS: FIRST AND SECOND HIGHEST MOVERS BY AGE GROUPS, COLOR AND SEX, 1960**

Different House	White		Nonwhite	
	Male	Female	Male	Female
Movers:				
Same county	5-9 ¹ 10-14 ²	5-9 10-14	5-9 10-14	5-9 10-14
Same state	5-9 20-24	5-9 20-24	20-24 5-9	20-24 5-9
Migrants:				
Different state	5-9 10-14	5-9 10-14	20-24 5-9	20-24 5-9
Abroad	25-29 20-24	25-29 30-34	25-29 20-24	25-29 30-34
Moved, residence not reported	20-24 25-29	20-24 25-29	20-24 25-29	20-24 25-29

Source Code: BOC-3 1960

¹Age group of 1st highest mover

²Age group of 2nd highest mover

²The data reported in Tables 2.21, 2.24, 2.28, 2.29, 2.30, 2.33, 2.35, 2.36, and 3.21 which follow are based upon information from the 1960 census. Data for 1970 were not available for use at the time of printing.

MARRIAGE AND DIVORCE

Information pertaining to the marital status of Florida's population is presented in Tables 2.22 through 2.25. Table 2.22 shows the proportion of married persons which had been increasing since 1930 turned down in 1970. The increase in the number of divorced persons remained steady, approximately tripling for both males and females in the 40-year period reported. This table also indicates the continued increase in the preponderance of widowed females over widowed males.

Table 2.22. **MARITAL STATUS BY SEX, 1930-1970¹** (In Percent)

Status/Sex	Year				
	1970	1960	1950	1940	1930
Single:					
Male	24.4	21.6	22.9	31.0	32.2
Female	18.0	14.9	15.2	22.1	23.1
Married:					
Male	68.9	71.8	70.4	62.8	60.9
Female	63.1	68.4	68.0	61.6	62.0
Divorced:					
Male	3.4	2.7	2.5	1.6	1.2
Female	5.0	3.6	3.3	2.3	1.7
Separated:					
Male	1.9	2.1	3.1	NA	NA
Female	2.5	2.8	3.8	NA	NA
Widowed:					
Male	3.3	3.9	4.2	4.6	5.2
Female	13.9	13.1	13.5	14.0	13.1

Source Code: BOC-2 1950, 1960, 1970

¹Persons 14 years old and over.

Table 2.23 shows a higher percent of single and separated persons among nonwhites than whites. This is particularly noticeable in the category of separated, running about seven times higher for nonwhite males and about eight times higher for nonwhite females. The preponderance of widowed females over widowed males is indicated for both races, the percent being the same for both white and nonwhite females.

Table 2.23. **PERCENT MARITAL STATUS BY SEX AND RACE, 1970**

Status	Male		Female	
	White	Negro	White	Negro
Single	22.7	34.9	16.5	27.2
Married	70.8	57.1	64.4	53.9
Divorced	3.4	3.2	5.1	4.9
Separated	1.1	7.0	1.3	10.1
Widowed	3.1	4.8	14.0	14.0

Source Code: BOC-2 1970, BOC-3 1970

¹Population 14 years of age and over

Table 2.24 indicates there is a smaller proportion of married males in the rural farm category, as well as lower proportions in the divorced, separated and widowed categories. Females, however, presented a somewhat different picture in 1960, the latest figures available.

Marriage and divorce rates for Florida and the U.S. are compared in Tables 2.25 and 2.26. Although Florida's overall marriage rate was slightly lower than that for the nation in 1970 (Table 2.25) the divorce rates have been consistently higher than for the nation since 1940 and in 1970 were two percentage points higher.

The divorce rates in Table 2.26 do not take into account separations without divorce. This lack of reliable statistics distorts the picture of marriages that have actually been dissolved. This situation has, historically, been of greater significance among nonwhites. The effect of this is related to the information in Table 2.7 in the preceding Population series, which shows the proportion of nonwhites in Florida exceeds that for the nation.

Minor children aged 18 and under are involved in approximately 55 percent of all divorces in Florida. More than one minor child is involved in 31.7 percent of divorce cases.

Table 2.24. PERCENT MARITAL STATUS BY PLACE OF RESIDENCE AND SEX, 1960¹

Marital Status	State		Urban		Rural Nonfarm		Rural Farm	
	Male	Female	Male	Female	Male	Female	Male	Female
Single	21.8	14.7	20.8	14.9	24.3	13.7	29.5	18.2
Married	72.0	68.6	72.8	67.2	70.1	73.8	65.8	70.5
More than once	22.1	21.4	22.0	21.5	22.4	21.7	18.2	15.2
Divorced	2.7	3.7	2.8	4.2	2.4	2.2	1.8	1.4
Separated	2.1	2.8	2.2	3.1	1.8	2.0	1.3	1.3
Widowed	3.5	12.9	3.6	13.8	3.1	10.3	2.9	9.9

Source Code: BDC-3

¹Population 14 years old and over

Table 2.25. MARRIAGE RATES BY COLOR, 1970¹

	Total	Color	
		White	Nonwhite
Florida	10.1	10.5	8.6
United States	10.7	NA	NA

Source Code: DHRS-1 1970

¹Per 1,000 Population

Table 2.26. DIVORCE RATES, 1940-1970¹

	Year			
	1970	1960	1950	1940
Florida	5.5	3.9	6.4	5.8
U. S.	3.5	2.2	2.6	2.0

Source Code: DHRS-1

¹Per 1,000 population

Table 2.27. DIVORCES INVOLVING MINOR CHILDREN, 1969

Number of Children	Number of Divorces	Percent
No minor children	15,473	44.7
One child	7,765	22.4
Two children	5,767	16.7
Three or more	5,197	15.0
Unknown	398	1.2
Total divorces	34,600	100.0

Source Code: DHRS-1 1970

FAMILY SIZE

Data pertaining to family size are presented in Tables 2.28 through 2.30. Rural families, both farm and nonfarm, tend to have more children under age 18 than do urban families (Table 2.28).

There was a higher percent of urban families with one child. There was a higher percent of rural and nonfarm families with two or three children. Families with four or more children were markedly more numerous proportionately among rural farm families.

Table 2.28. **SIZE OF FAMILY: PERCENT OF FAMILIES WITH CHILDREN UNDER 18 YEARS OF AGE BY TYPE OF RESIDENCE, 1960**

Residence	Percent of Families by Number of Children				
	None	1	2	3	4 or more
State	47.8	17.8	16.4	9.5	8.4
Urban	49.1	17.9	16.4	9.1	7.5
Rural Nonfarm	43.5	17.7	16.9	10.6	11.3
Rural Farm	48.1	16.5	14.5	9.0	11.9

Source Code: BOC-3 1960

A tendency for more white than nonwhite families to be childless is indicated in Table 2.29. In the larger family category (four or more children under age 18) nonwhites outnumbered whites about three to one, a difference much greater than in any other category.

Table 2.29. **SIZE OF FAMILY BY NUMBER OF CHILDREN UNDER 18 YEARS OF AGE BY COLOR, 1960**

Color	Percent of Families with Children Under 18 Years Old				
	None	1	2	3	4 or more
White	48.5	18.1	17.2	9.5	6.7
Nonwhite	43.5	16.3	11.8	9.1	19.3

Source Code: BOC-3 1960

The percent of households with both spouses present is shown in Table 2.30. It was significantly higher among whites (90.4 percent) than nonwhites (72.9 percent). In categories where only one was present, households headed by females outnumbered those headed by males in every category except that of white single males but even in this case the variance was minor.

Table 2.30.

Spouse Absent

Source Code: BOC-3 1960

HOUSING

Table 2.31 indicates the typical Florida resident owned the house in which he lived (68.6 percent). The typical house had 4.7 rooms, sound plumbing (94.9 percent) and was valued at \$15,000. While the percent of home ownership was higher in rural areas (78 percent) the median value was lower at \$11,600.

Table 2.32, which isolates data on Negro housing characteristics, shows some differences from the housing picture as a whole. Except for those living in rural areas, less than half of this group owned their own homes. The proportion of Negro housing with sound plumbing was 78.8 percent compared with the 94.9 percent shown in the previous table for the entire state. In the category of rural housing, occupancy of more than one person per room was the case in 26.4 percent of the homes, compared with 9 percent for the state as a whole (Table 2.31).

INCOME

Median income of Floridians, age 14 and over, is reported in Table 2.33. Income varied markedly with color, sex and place of residence. When color were held constant, males tended to receive higher income than females. When sex and color were held constant, urban income tended to be higher than nonurban. When sex and residence were taken into account, whites tended to receive higher incomes. Taking all three variables into consideration, white urban males received the highest income and nonwhite rural farm females the lowest.

Wide discrepancies in income between whites and nonwhites are shown in Table 2.34. Among nonwhites, 27.6 percent of the families had incomes below \$3,000. Among whites, only 10.8 percent were at this income level. Both these percentages are substantially higher than for the nation. Median income for Florida nonwhites was slightly more than half the national average for all families. Median income for Florida white families (\$8,267) was still well below the national median of \$9,433. In the higher income levels (\$15,000 a year and up) the difference between the races was even more marked. Among Florida white families, 18.6 percent were in this category compared to the national percent for all families of 19.2. But only 3.6 percent of Florida nonwhites were at this income level.

Table 2.31. CHARACTERISTICS OF HOUSING BY PLACE OF RESIDENCE, 1970

Characteristics	State	Urban	Rural	SMSA	
				Inside	Outside
All Housing Units:					
Med. No. of rooms	4.7	4.7	4.7	4.7	4.7
Sound plumbing facilities	94.9%	96.2%	89.1%	96.4%	91.8%
Occupied Units:					
Med. No. of persons	2.4	2.4	2.5	2.4	2.4
More than one person/room	9.0%	8.6%	10.7%	9.1%	8.7%
Negro	12.1%	12.4%	10.6%	12.0%	12.3%
Owned	68.6%	66.4%	78.0%	66.3%	73.6%
Rented	31.4%	33.6%	22.0%	33.7%	26.4%
Median value	\$15,000	\$15,600	\$11,600	\$15,800	\$13,100
Median rent	\$92	\$97	\$65	\$102	\$70

Source Code: BOC-4 1970

Table 2.32. CHARACTERISTICS OF NEGRO HOUSING, 1970

Characteristics	State	Urban	Rural	SMSA	
				Inside	Outside
Med No. of rooms	4.3	4.3	4.4	4.3	4.5
Med. No. of persons	3.1	3.1	3.2	3.1	3.0
Sound plumbing facilities	78.8%	84.7%	48.1%	NA	NA
More than one person/room	26.4%	25.9%	29.3%	27.1%	25.1%
Owned	48.7%	46.6%	59.9%	46.8%	52.8%
Rented	51.2%	53.4%	40.1%	53.2%	47.2%
Median value	\$9,100	\$9,900	\$5,600	\$10,300	\$6,800
Median rent	\$59	\$61	\$36	\$64	\$44

Source Code: BOC-4 1970

Table 2.33. **MEDIAN INCOME OF PERSONS 14 YEARS OF AGE AND OVER BY PLACE OF RESIDENCE, COLOR AND SEX, 1960**

Residence	Total	Males		Females	
		White	Nonwhite	White	Nonwhite
State	\$2,313	\$3,743	\$2,073	\$1,308	\$844
Urban	2,416	4,006	2,261	1,401	908
Rural	1,985	3,175	1,409	984	639
Nonfarm	2,017	3,226	1,440	989	650
Farm	1,575	2,461	1,085	931	497

Source Code: BOC-3 1960

Table 2.34. **FAMILY INCOME BY COLOR, 1970**

Color	Income Level		Median Income
	Less Than \$3,000	\$15,000 and Over	
United States	9.3%	19.2%	\$9,433
White	8.1	20.6	9,794
Nonwhite	20.4	8.3	5,999
Florida	12.8	16.8	8,267
White	10.8	18.6	8,818
Nonwhite	27.6	3.6	5,016

Source Code: BOC-3 1970

The relationships between education and personal income are shown in Tables 2.35 and 2.36. In both tables income is measured according to the amount of education and by sex. The direct correlation between the amount of schooling and income is obvious, income rising in a steady progression according to the degree of education. The table also shows wide disparity in income between the sexes at the same educational levels, median income of females being somewhat less than half that of males at every level except the highest, where it is slightly more than half.

Table 2.35 MEDIAN EDUCATION BY INCOME LEVEL AND SEX, 1960

Median Education of Persons by Income (dollars)										
Sex	1 to 999 or less	1,000 to 1,999	2,000 to 2,999	3,000 to 3,999	4,000 to 4,999	5,000 to 5,999	6,000 to 6,999	7,000 to 9,999	10,000 and over	
Male	7.8	8.4	8.7	10.0	11.5	12.1	12.3	12.6	13.8	
Female	9.0	10.3	12.0	12.5	12.7	13.7	13.0	13.0	12.8	

Source Code: BOC 3 1960

Table 2.36

MEDIAN PERSONAL INCOME BY YEARS OF SCHOOL COMPLETED AND SEX FOR FLORIDA, 1960¹

Years of School Completed	Median Income (dollars)	
	Males	Females
None	\$1,443	\$ 639
1 to 5 years	1,964	713
High School	4,781	1,254
Some College	5,274	2,036
College or more	6,524	3,558

Source Code: BOC-3 1960

¹Persons 25 years and older**OCCUPATION AND EMPLOYMENT**

Trends in occupational activities for employed males and females appear in Table 2.37. For males, there has been a reduction in the proportion employed as farmers and farm managers, farm laborers and foremen. Increases for males are most notable in the professional categories, craftsmen, foremen and kindred workers, and managers, officials and proprietors. Increases among females are most notable in clerical and kindred workers, which almost tripled in three decades, and in service workers. There has also been an increase in female craftsmen, foremen and kindred workers, but actual percent of the female work force involved is small. The overall shift from agricultural to professional and service categories is evident throughout.

The rank order of occupational groups based on numbers of employed in 1970, as well as median earnings for each group, appear in Table 2.38. Several contrasts between race and sex are apparent. Most notable is that the rank order of occupations is different for white and Negro males. Of the 12 occupations listed only one—craftsmen, foremen and kindred workers—is among the top five in rank order and in median earnings for both groups. When rank order is combined with median earnings, it is clear that whites tend to be found in the higher paying occupations while Negroes are found in the lower paying occupations. There is also an obvious disparity in median earnings between males and females in the one instance in the table where such a comparison can be made.

Table 2.37. TRENDS IN OCCUPATIONAL GROUPS OF EMPLOYED PERSONS BY SEX IN PERCENT, 1940-1970

Occupational Group	Male				Female			
	1970	1960	1950	1940	1970	1960	1950	1940
1) Prof., Tech., & Kindred Workers	13.5	9.6	6.7	5.6	14.3	11.6	11.0	10.6
2) Farmers & Farm Mgr.	1.0	1.8	5.5	8.3	0.2	0.3	0.7	1.1
3) Mgrs., Officials & Prop. (Exc. farm)	12.8	14.2	13.9	11.5	4.4	5.4	6.3	4.5
4) Clerical & Kindred Workers	7.2	5.9	5.4	4.7	34.1	26.3	20.8	12.7
5) Sales Workers	9.0	8.1	7.6	7.6	8.2	8.0	8.6	6.5
6) Craftsmen, Foremen & Kindred Workers	22.8	20.2	18.7	12.8	1.8	1.0	1.0	0.6
7) Operatives & Kindred Workers	13.7	14.1	14.3	13.1	10.1	9.4	11.2	11.3
8) Private Household Workers	0.1	0.2	0.4	1.1	6.0	12.4	15.7	29.9
9) Service Workers (Exc. above)	8.8	6.8	7.1	7.3	18.1	15.7	15.5	13.0
10) Farm Laborers & Foremen	2.9	4.3	7.7	11.8	1.9	3.0	7.0	7.0
11) Laborers, (Exc. farm & mine)	8.1	8.6	11.4	15.5	0.9	0.5	0.8	1.1

* Source Code: BOC-3 1970, 1960, 1950, 1940

Table 2.38. **RANK ORDER OF OCCUPATIONAL PARTICIPATION
AND MEDIAN EARNINGS OF EMPLOYED PERSONS BY
SEX AND COLOR, 1970**

Occupational Group	Male		Female		Earnings	
	W	NW	W	NW	Male	Female
Prof., Tech., Kindred	2	6	3	5	\$9,843	NA
Farmers & Farm Mgrs.	10	10	11	11	5,087	NA
Mrgs, Officials & Prop. (exc. farm)	3	8	6	10	NA	NA
Clerical & Kindred	7	7	1	4	NA	\$3,887
Sales Workers	5	9	5	7	NA	NA
Craft, Foremen, Kindred	1	3	7	9	7,139	NA
Operatives & Kindred	4	2	4	3	5,404	3,004
Private household	11	11	8	2	NA	NA
Service Workers (exc. household)	6	4	2	1	NA	NA
Farm Laborers & Foremen	9	5	9	6	2,985	NA
Laborers (Exc. farm & mine)	8	1	10	8	3,627	NA

Source Code: BOC-3 1970

Looking at this same information by industry instead of occupation in Table 2.39, a different set of trends emerges. Of particular interest was the shift of agriculture from second to ninth position and the increasing importance of professional and related services which increased 115.1 percent between 1960 and 1970. Other large increases were in wholesale and retail trade and in manufacturing. Both business and repair services and financial, insurance and real estate also showed large gains in percent, although the numbers involved were smaller.

The rank order of industrial groups, based on the percent of employed age 14 and over, appears in Table 2.40. Differences are shown between the sexes, within the racial groups and between racial groups of the same sex. While personal service ranks first for Negro females, it is fifth for white females. The most notable difference between the races is in agriculture, forestry and fisheries, which ranks ninth for whites of both sexes, but third for Negro males and fourth for Negro females. The widest difference between the sexes is in the field of construction.

Table 2.39. TRENDS IN INDUSTRY GROUP OF THE EMPLOYED, 1940-1970¹

Industry Group	Percent			Change 1940 to	Rank Order of Participation			
	1970	1960	1950	1940	1970	1960	1950	1940
Agriculture, Forestry & Fisheries	4.1	6.8	13.3	19.1	-15.0	9	7	2
Mining	0.4	0.4	0.5	0.4	0.0	12	12	12
Construction	7.8	9.1	9.0	6.5	1.3	4	5	7
Manufacturing	13.1	13.1	10.9	11.9	1.2	3	2	4
Transp., Commun., & Public Utilities	7.1	7.9	7.9	6.8	0.3	5	6	7
Wholesale & Retail	22.0	21.7	23.7	20.4	1.6	1	1	1
Fin. Ins. & Real Estate	5.7	5.3	3.8	3.1	2.6	7	9	9
Business & Repair Ser.	3.5	3.2	2.5	1.4	2.1	10	10	11
Personal Service	6.9	10.3	12.0	16.7	-9.8	6	4	3
Entertainment & Rec. Ser.	1.2	1.2	1.4	1.5	-0.3	11	11	10
Prof. & Related Services	15.8	11.3	8.3	6.8	9.0	2	3	6
Public Administration	5.3	5.2	5.1	3.2	2.1	8	8	8

Source: Code BOC-3 1970, 1960, 1950, 1940

¹Employed Persons 14 years and older

Table 2.40. **RANK ORDER OF PARTICIPATION IN INDUSTRY GROUP OF THE EMPLOYED BY SEX AND RACE, 1970**

Industry Group	White		Negro	
	Male	Female	Male	Female
Agriculture, Forestry & Fisheries	9	9	3	4
Mining	12	12	12	12
Construction	3	10	2	10
Manufacturing	2	3	4	5
Transport., Commun., & Pub. Utilities	5	6	5	7
Wholesale & Retail Trade	1	2	1	3
Finance, Ins. & Real Estate	7	4	10	6
Business & Repair Service	8	8	9	9
Personal Services	10	5	7	1
Entertainment & Rec. Services	11	11	11	11
Professional & Related Services	4	1	6	2
Public Administration	6	7	8	8

Source Code: BOC-3 1970

Tied directly to employment are figures on unemployment which appear in Tables 2.41, 2.42 and 2.43. The rate of unemployment in 1970 (Table 2.41) was under the national average. This was particularly so for nonwhites, with a jobless rate of 5.2 percent compared with the national rate of 8.2 percent. Table 2.42 breaks down the figures further by sex and provides historical perspective. It shows a consistently higher rate of unemployment for females. Only in teenage unemployment (Table 2.43) does the Florida rate exceed that of the nation. Note, however, the rate for nonwhite teenage unemployment, although higher than that for whites, was lower than the national figure.

Table 2.41. **UNEMPLOYMENT RATE AS PERCENT OF TOTAL LABOR FORCE BY COLOR, 1970**

	Total	White	Nonwhite
United States	4.9	4.5	8.2
Florida	3.8	3.5	5.2

Source Code: BOC-3 1970

Table 2.42. **UNEMPLOYMENT RATE AS A PERCENT OF TOTAL LABOR FORCE BY SEX AND COLOR FOR FLORIDA, 1940-1970**

Sex/Color	Year			
	1970	1960	1950	1940
Male				
White	3.0	4.6	4.4	13.1
Nonwhite	4.4	6.5	4.8	14.4
Female				
White	4.3	4.8	4.0	14.1
Nonwhite	6.2	7.1	6.2	10.7

Source Code: BOC-3 1970, 1960, 1950

Table 2.43. **TEENAGE UNEMPLOYMENT, AS A PERCENT OF TOTAL UNEMPLOYMENT, (AGES 16-19) FOR 1968**

	Unemployment Rates		
	Total	White	Nonwhite
United States	12.7	11.0	25.0
Florida	16.0	15.1	20.7

Source Code: FSA 1969

EDUCATION

The percent of persons age 5-24 enrolled in school is given in Table 2.44. This shows a sharp increase in enrollment since 1940. Figures are not available to permit a comparison with national data for the 30-year period. However, Table 2.45 shows that in 1970, Florida school population age 5-34 was only 2.5 percent lower than the national average. Note that different age groups are used in these two tables. Table 2.45 also compares figures for white and nonwhite, showing the percent of nonwhite population enrolled in school is higher than for whites.

Table 2.44. **PERCENT OF POPULATION 5 TO 24 YEARS OLD ENROLLED IN SCHOOL, 1930-1970**

Age Group	1970	1960	1950	1940	1930
5 to 24 Yrs.	72.9	68.6	60.8	54.7	54.0

Source Code: BOC-3 1970, 1960, 1950

Table 2.45. **PERCENT OF POPULATION 5 TO 34 YEARS OF AGE ENROLLED IN SCHOOL BY COLOR, 1970**

	Total	White	Nonwhite
United States	58.9	58.6	60.6
Florida	56.4	55.9	59.7

Source Code: BOC-3 1970

School enrollment by age and urban/rural residence is given in Table 2.46. Differences attributed to residence do not become notable until after the age 16-17 category. At that age level the proportion of rural nonfarm population in school begins to decrease markedly compared to urban and rural farm categories.

Table 2.46. **PERCENT OF POPULATION ENROLLED IN SCHOOL BY AGE AND PLACE OF RESIDENCE, 1970**

Age	State	Urban	Rural		SMSA	
			Nonfarm	Farm	Inside	Outside
5-6	73.3	75.0	67.4	65.3	74.8	70.2
7-13	97.0	97.2	96.0	96.4	97.6	95.8
14-15	94.4	95.1	91.8	90.9	95.4	92.3
16-17	86.4	87.6	81.8	83.6	87.8	83.6
18-19	54.0	55.8	45.5	52.2	55.6	50.1
20-21	27.0	29.4	16.3	15.4	30.3	18.0
22-24	13.3	14.6	8.0	7.7	15.4	8.1
25-34	6.0	6.4	4.4	3.1	6.6	4.6
5 to 34	56.3	56.8	54.1	58.3	56.7	55.8

Source Code: BOC-3 1970

RELIGION

Religious preferences and trends in those preferences for Florida's population are extremely difficult to assess. Not only are historical data virtually nonexistent but those estimates which are currently available are subject to error. Table 2.47 presents some estimates of church membership in 1968 which show 41.7 percent of Florida's population to be enrolled as church members.

Table 2.47. ESTIMATED RELIGIOUS AFFILIATION, 1968

Organization	Number	
A.M.E.	60,000	(African Methodist Episcopal)
A.M.E. Zion	2,500	
Christian	18,860	(Disciples)
C.M.E.	26,000	(Christian Methodist Episcopal)
Church of Brethren	1,200	
Episcopal, Diocese of Florida	22,908	
Episcopal, Diocese of S. Florida	64,918	
F.F.C.C.	6,000	(Community Churches)
Lutheran Church in America	28,773	
Presbyterian, U. S.	96,211	
United Church of Christ	26,692	
United Methodist	299,225	
United Presbyterian, USA	43,889	
Baptist (Southern)	611,756	
Roman Catholic	747,000	
Jewish	130,000	
Negro Baptist	200,000	
All Others	200,000	
TOTAL	2,585,432	
Percent of Total Florida Population, 1968	41.7	

Source Code: FCC 1968

SUMMARY AND CONCLUSIONS

This section has presented a variety of information about the population of Florida. It is, in effect, a selected statistical abstract, describing the population and in some cases indicating historical trends. While this kind of information is of inherent value, it also contains implications for education.

Perhaps the most obvious are those having to do with growth and urbanization. Assuming the state continues to grow and become more urban, schools face the necessity to accommodate increasing enrollments. While urban centers will be most affected by size and growth, rural areas may experience different problems of dwindling resources as they lose population to the cities.

It is apparent that Florida's occupational structure and

economy have undergone important changes. The economy has been shifting from agricultural as the emphasis swings to commercial, trade, financial, manufacturing, and professional and other service activities. The shift reflects the increasingly urban character of the state.

On the assumption that these trends will continue (or at least not begin to reverse), there are several implications for education. A modern industrial-service economy requires skills and orientation different from those by a more traditional agricultural economy. The basic problem this poses for education is the challenge of anticipation and articulation—anticipation of new employment patterns and opportunities, and development of educational programs adapted to these changes.

A variant of this problem is tied to the rural-to-urban migration. There is a high and increasing probability that young persons growing up and being educated in rural areas will spend substantial portions of their working years in urban areas. Consequently rural as well as urban schools need to develop educational programs that are responsive to these changes and maximize the ability of their graduates to take advantage of new employment opportunities.

Several of the population characteristics presented in this section involved comparisons of Florida's white and nonwhite residents. Some of the differences by race pose additional problems for education. For example, the nonwhite population is becoming urbanized more rapidly than the white. Consequently, these problems generated by urbanization are more salient and critical for nonwhite youth.

Data presented on occupation by race also suggest that employment patterns of nonwhites lag behind those of whites in the overall shift from agricultural to industrial-service jobs. The educational system is challenged to develop programs that prepare nonwhite youths to move more rapidly into new job opportunities in new fields.

In fact the preponderance of the data presented here on such characteristics as mortality, family size, housing, unemployment and income document gross disparities and inequities in the quality of life experienced by Florida's white and nonwhite populations. There is little agreement on how great an impact the schools can make in reducing these differences. To the extent that public education is committed to the equalization of opportunity for all citizens, however, the reduction of the racial differences presented here represents a major problem for contemporary schools.

CHAPTER III

PERENNIAL OBJECTIVES

The techniques of education have been improved but the goals have scarcely been changed. The task force which prepared the plan for this Needs Study made this discovery when they listed the objectives of an effective school system. The broad areas of human experience toward which modern education should be directed were found to be almost identical with the Seven Cardinal Principles which the National Education Association enumerated over a half century ago. The task force called these Perennial Objectives and developed strategies for assessing the status of Florida learners in each of these areas. The statistical results are set forth in this section.

COMMUNICATIONS AND LEARNING SKILLS

Florida has two statewide testing programs, one at grade nine, the other at grade twelve. Both programs employ the School and College Ability Test (SCAT) and, as well, special tests in the area of English, Social Studies, Mathematics, and Science. Over

Table 3.1. **APPROXIMATE PERCENT OF STUDENTS FALLING BELOW THE 50th PERCENTILE ON THE APTITUDE PORTION OF THE STATEWIDE NINTH GRADE TEST, 1968-69, 1969-70**

Test	1968-69		1969-70	
	Number Tested	Percent Below Norm	Number Tested	Percent Below Norm
Verbal	106341	62	111825	61
Quantitative	106348	67	111868	66
Combined Aptitude	106393	67	111760	67

Source Code: NGTS 1970

the past several years, ninth grade students have consistently been below the national norm, both in verbal and quantitative sections of the SCAT test. The data reported in Table 3.1 is typical of this performance. Out of approximately 106,000 ninth graders taking the test in 1968-69, 62 percent and 67 percent respectively were below the verbal and quantitative norms. Tests on approximately 111,000 ninth graders in the following year showed improvement of only one percent.

A study of the performance of Florida students in grade nine by sex and age has been published by the ninth-grade testing program. The results of this study are cited below:

"The mean test performance by sex and age is shown in Table 3.2. These means were computed on a random sample of 900 pupils. The facts are apparent in the table and were supported by statistical analysis of the scores:

- a. There is no significant difference in mean test performance of males and females on the Florida Ninth Grade Test Battery except for the English Achievement Test.
- b. There is a significant difference in mean test performance by ages on all tests in the battery.

"As can be seen in Table 3.2, there is a difference of 5.15 points in the mean performance of males and females on the English test. This difference for English proved to be statistically significant. The superior performance of the female pupils is general across items, with 19 items showing substantial differences in performance favoring the females. The difference for the other tests ranged from .05 to .68 raw score points.

"Table 3.2 also shows the mean for each of the four most frequently occurring ages of ninth grade students taking the battery. The general trend from highest to lowest mean follows the age in this order: 14, 13, 15, 16. In general there are slight differences in means for ages 13 and 14, ranging from .41 to 1.44 points lower for the 13-year-old group. Since most beginning ninth graders are 14 years old, the 13-year-old group probably consists largely of those students who started school a year early, or perhaps advanced a grade at some point

in their schooling. One would not expect a large difference to exist as these two groups are probably nearly alike as to general ability.

Table 3.2. **MEAN PERFORMANCE ON EACH TEST OF THE FLORIDA STATEWIDE NINTH GRADE TEST BY AGE AND SEX, 1967-68**

Test	Total Male	Total Female	Ages			
			13	14	15	16
SCAT V	30.23	29.98	31.35	31.76	23.91	21.45
SCAT Q	28.67	28.24	29.51	30.16	21.92	21.08
SCAT Total	58.90	58.22	60.86	61.92	45.83	42.53
Social Studies	27.55	27.03	27.66	28.77	22.46	20.18
English ¹	36.07	41.22	39.46	40.89	30.87	25.38
Math Comp.	23.35	23.30	23.92	24.68	18.34	17.43
Math P.S.	21.20	20.94	21.81	22.48	16.00	14.40
Math Total	44.55	44.24	45.72	47.16	34.34	31.83
Science	40.28	39.92	41.21	42.13	32.58	30.78
Number Pupils	468	425	Male 71 Female 74	282 298	80 48	35 5
			Total 145	590	128	40

Source Code: NGTS 1968

¹The difference in TM and TF means proved significant at the .05 level as did the difference in age means. This was analyzed by a two-way ANOVA design.

"The difference in means for ages 14 and 15 are substantially ranging from 6.09 to 12.82 points lower for the latter group. This 15-year-old group probably consists largely of those who are one-grade repeaters, and if past performance can be considered indicative of both future performance and general ability, one would expect the mean to be lower. The test user should remember that the total range of differences between two means for ages 14 and 15 are all significantly different. This probably is also true for the range of means for 14 and 15 year olds.

"The differences in means for ages 14 and 16 are very substantial, ranging from 7.25 to 19.39 points lower for the 16-year-old group, and are all significant differences. One must use caution in interpreting their scores.

However, it is probably logical to assume that most of these students are two-grade repeaters and, therefore, such performance would not be surprising. It is also interesting to note that the ratio of males to females in this group is almost seven to one."¹

In addition to investigating the effect of sex and age on student performance on ninth-grade standardized tests, the testing service also investigated the effect of school size. A summary of this study is quoted below:

"Since it can be argued that school size is an indication of at least the quantity of educational opportunity, and perhaps also the quality of such opportunity, it was felt advisable to undertake an analysis in order to determine what, if any, relationship existed between school size and performance on tests in the ninth-grade battery.

"The number of ninth-graders in each participating school was selected as the criterion of school size. This allowed a 'standard unit of measurement' for all schools and avoided the pitfall that various schools are organized in different number of grades, e.g., 6-3-3, 8-4, 6-6, etc. Performance was defined as each school's mean score for each of the nine scores reported.

"Positive relationships between school size and school mean scores were found for all tests included in the ninth grade battery, i.e., the larger mean scores were associated with larger enrollment. This, of course, is not intended to imply a causal relationship. The analysis was not designed, nor could it be with present data, to provide results that could support the premise that increasing school enrollment will automatically increase mean school achievement. The intent of this subsection is to report the observed relationships. Precise interpretations are premature at this point.

"The correlations for the private schools are the smallest, being .08 to .29, perhaps partially due to the restricted

¹Florida State University, College of Education, Department of Educational Research and Testing, Florida Statewide Ninth Grade Testing Program, Technical Report Number 6-68.

range in school size, most being small. Combined, the public and private schools yield correlations of .27 to .36 with a pronounced positively skewed distribution of school sizes. These correlations are shown in *Table 3.3*.²

Table 3.3. **CORRELATIONS BETWEEN PERFORMANCE ON EACH TEST OF THE FLORIDA STATEWIDE NINTH GRADE TEST AND SCHOOL SIZE, 1967-68**

Tests	Private Schools	Public Schools	All Schools Combined
SCAT Verbal	.22	.51	.33
SCAT Quantitative	.26	.46	.32
SCAT Total	.24	.49	.33
Social Studies	.21	.46	.28
English	.24	.45	.27
Math Comprehension	.29	.46	.30
Math Problem-Solving	.26	.48	.32
Math Total	.28	.47	.31
Science	.08	.49	.36

Source Code: NGTS 1968

Data for 1963-70 for only the aptitude portion of the 12th grade battery, are presented in Table 3.4. In this table, all Florida seniors are included in the comparison with the national sample and are seen to rank slightly above the national mean in performance. There is, however, some question as to whether 12th grade test performance is actually acceptable as status data because of the very apparent "culling out" of less capable students at the secondary level in Florida schools. It would also be necessary to know the national attrition between grades nine and twelve. The drop in enrollment between these grades is significant. For example, in 1969, slightly over 72,000 took the twelfth grade test, while three years earlier approximately 102,000 students were enrolled in the ninth grade. This difference, plus the marked increase in the level of student performance on the twelfth grade test would strongly suggest that many of the students having the greatest need in this area are prematurely terminating their formal education.

²ibid.

Table 3.4. **EQUIVALENT MEAN SCALED SCORES FOR ALL SENIORS ON THE APTITUDE TEST OF THE FLORIDA STATEWIDE 12th GRADE TESTING PROGRAM, FALL 1963 THROUGH FALL 1970**

Year	Number Tested	Florida Mean	National Mean	Approximate Percent Above Nat'l Mean
1970	83,158	292	291	50+
1969	82,039	288	287	50+
1968	79,110	288	287	50+
1967	73,071	288	287	50+
1966	71,552	290	287	50+
1965	67,517	290	287	50+
1964	67,507	290	287	50+
1963	59,992	290	287	50+

Source Code: ETS 1963-1970

There are several additional types of data which may be used as sources for information about the communication and learning abilities of Florida students. Table 3.5 provides comparative historical data for the United States and for Florida on the percent of selective service draftees failing preinduction and induction mental tests for the period 1962-70. For this period, the per-

Table 3.5. **PERCENT OF SELECTIVE SERVICE DRAFTEES FAILING PREINDUCTION AND INDUCTION MENTAL TESTS, 1962-1970**

	Year								
	1970	1969	1968	1967	1966	1965	1964	1963	1962
United States	5.3	7.1	11.8	11.3	12.4	21.4	29.9	24.7	24.5
Florida	5.9	10.8	16.2	11.3	17.9	26.4	35.8	33.8	32.9
Difference	0.6	3.7	4.4	0.0	5.5	5.0	5.9	9.1	8.4

Source Code: ROS 1962-1968, BOC-5 1971

cent of draftees rejected in Florida has persistently exceeded national figures, although the gap was almost closed in 1970. While Table 3.5 indicates a trend toward the reduction of this difference, there has also been an overall reduction in the proportion of men failing the test nationwide. Consequently, any interpretation of apparent trends based on the data reported in this table should be tempered by the possibility that some of the equalization between rates could be the result of changing criteria for passing mental examinations, or changing deferment practices by the Selective Service System, or both.

A more complete breakdown which gives the percent of Floridians disqualified during their preinduction examinations for military service, by reason of rejection, is shown in Table 3.6. Disqualifications for medical reasons were slightly above the national norm for the year covered (1970). Disqualifications for failure to meet mental requirements were also more numerous in Florida than in the nation.

Another type of data which may be used, if only indirectly, to explore the area of communication and learning skills is that pertaining to the literacy level.

Census figures for Florida and for the U.S. show a persistent decline in the percent of illiterates (i.e., persons who can neither read nor write in any language) from 1910 to 1970. These data are in Table 3.7.

The rate of functional illiteracy (less than five years of school) shows a similar decline (Table 3.8). This table shows that the state has made consistent gains in the amount of schooling completed at all levels. At the high school and college levels the percent has almost doubled in the past 30 years. The rate for functional illiteracy for Florida has decreased, corresponding to the national experience. The large expansion of the state's population indicates that the actual *number* of functional illiterates has risen. Therefore, the problem remains a serious one for the school system.

Functional illiteracy rates are strongly influenced by race and, to a lesser degree, by sex and place of residence. These relationships are shown in the following three tables. Table 3.9 shows the disparity between the races. While the percent of functional illiteracy for whites in Florida was lower than for the nation, the percent for nonwhites was higher than that for the nation and about six times higher than for whites in Florida. Nonwhites consistently completed fewer years of schooling at all levels, the median amount of education being over three years less than for whites.

Table 3.6. STATUS OF SELECTIVE SERVICE DRAFTEES
EXAMINED FOR MILITARY SERVICE, 1970 (In Per-
cent)

	Number Examined (1000)	Total Dis- qualified	Medically Dis- qualified	Failed Mental Test	Limited Train- ability ¹	Medical and Mental	Adminis- tratively Disqual- ified ²
United States	1,004.6	45.7	37.6	4.8	0.9	1.4	1.0
Florida	35.0	49.3	40.1	5.9	0.8	1.3	1.2

Source Code: BOD-5 1971

¹Passed basic mental test (AFQ) but failed additional aptitude requirements (AQB) and/or the English Reading Test (ERT).
²Persons disqualified for moral reasons, e.g., criminals, dishonorably discharged persons, etc. and aliens.

Table 3.7. **PERCENT ILLITERATE, 1910-1970¹**

	Year					
	1970	1960	1950	1930	1920	1910
United States	1.0	2.4	3.3	4.8	6.5	8.3
Florida	1.2 ²	2.6	3.9	7.7	10.2	14.4

Source Code: BOC-5 1970, 1960, 1950

¹Percent of population 14 years old and older

²Estimate

Table 3.8. **PERCENT OF POPULATION COMPLETING SELECTED SCHOOL YEARS, 1940-1970¹**

Year	Median School Yrs. Completed	Percent of Persons Completing				
		None	Less Than 5 Years ²	High School	Some College	College or More
1970	12.1	1.6	5.9	30.7	11.6	10.3
1960	10.9	2.1	9.2	25.1	9.7	7.8
1950	9.6	2.6	14.1	21.1	8.3	6.5
1940	8.6	4.0	18.8	15.4	6.2	5.0

Source Code: BOC-3 1970, 1960, 1950

¹Persons 25 years of age and over

²Functional illiteracy — includes the category "None"

Table 3.9. **PERCENT OF POPULATION COMPLETING SELECTED SCHOOL YEARS BY COLOR FOR THE U.S. AND FLORIDA, 1970¹**

Color	None	Less Than 5 Years ²	High School	Some College	College or More	Median Education
U.S.	NA	5.3	34.0	10.2	11.0	12.2
White	NA	4.2	35.2	10.7	11.6	12.2
Nonwhite	NA	15.1	23.4	5.9	4.5	9.9
Florida	1.6	5.9	30.7	11.6	10.3	12.1
White	1.2	3.9	32.7	12.6	11.1	12.2
Nonwhite	4.6	21.2	16.6	4.3	4.4	8.8

Source Code: BOC-3 1970

¹Persons 25 years of age and over

²Functional illiteracy — includes the category "None"

When the factor of sex is added (Table 3.10), the figures present another dimension. A larger percent of females completed high school than males but a smaller percent went on to college. The median amount of schooling was the same for both sexes for whites, while nonwhite females remained in school approximately a year longer than nonwhite males.

Table 3.10. **PERCENT OF POPULATION COMPLETING SELECTED SCHOOL YEARS BY SEX AND COLOR, 1970¹**

Years Completed	Male		Female	
	White	Nonwhite	White	Nonwhite
None	1.2	5.8	1.1	3.5
1 to 4 years.	3.2	20.2	2.3	13.6
High School	28.6	15.2	36.2	17.2
Some College	13.0	4.0	12.2	4.1
College or more	14.3	3.3	8.3	4.7
Median yrs. compl.	12.2	8.3	12.2	9.2

Source Code: BOC-3 1970

¹Persons 25 years of age and over

The percent of persons completing less than five years of school was higher for rural than for urban residents in 1970 (Table 3.11). The degree of difference by place of residence was not as great as in the areas of race and sex. Note that the median varied only slightly in all categories.

Table 3.11. **PERCENT OF POPULATION COMPLETING SELECTED SCHOOL YEARS BY PLACE OF RESIDENCE, 1970¹**

Years Completed	Urban	Rural		
		Total	Nonfarm	Farm
None	1.5	1.8	1.8	1.8
Less than 5	3.9	6.1	6.0	7.3
High School	31.2	28.8	29.0	27.1
Some College	12.2	8.7	8.9	6.9
College or more	11.0	7.0	7.2	5.8
Median	12.1	10.9	11.3	10.6

Source Code: BOC-3 1970

¹Persons 25 years of age and over

Another type of data providing some insight into communication and learning skills is the rate at which students are enrolling in foreign language courses in Florida's public schools (Table 3.12). During 1969-70, only 8.59 percent were in such classes. The rate for the secondary level was 19 percent, indicating a preponderance of these classes in the high school grades. Comparing these figures with those for earlier years (not shown in table form) a decline of enrollment in foreign language courses is indicated. The language most frequently studied in 1970 was Spanish, followed by French. Comparable national data for this period were not available.

Table 3.12. **FOREIGN LANGUAGE ENROLLMENT IN FLORIDA PUBLIC SCHOOLS, SCHOOL YEAR 1969-70**

Language	Number	As Percent of		
		Languages Taught	Total Enrollment	Secondary Enrollment
Spanish ¹	81,175	62.13	5.40	NA
French ¹	29,816	22.82	1.98	NA
German ¹	7,875	6.03	9.52	NA
Russian	542	0.41	0.04	0.08
Latin	10,837	8.30	0.72	1.58
Italian	249	0.19	0.02	0.04
Chinese	22	0.02	0.00	0.00
Hebrew	131	0.10	0.01	0.02
Total	130,647	100.00	8.69	19.00

Source Code: DOE-2

¹Elementary & Secondary

Data on nonpromotion in Florida's school system are provided in Tables 3.13 and 3.14. Grade one consistently produced the highest rates of nonpromotion, far outstripping any other grade level (Table 3.13). The next highest was at the tenth grade. While some small improvement was shown at the twelfth grade in the table, the relative stability of the nonpromotion rate by grade level over the years is striking.

Nonpromotion data by race for the school year 1960-61 are provided in Table 3.14. Later figures are not available since this type of information by race was not recorded after that date. These data show a much higher nonpromotion rate for nonwhites at all grade levels. However, desegregation was only in its initial

Table 3.13. **NONPROMOTION IN FLORIDA PUBLIC SCHOOLS BY GRADE LEVEL FOR SELECTED SCHOOL YEARS**
(In Percent)

School Year	Grade Level											
	1	2	3	4	5	6	7	8	9	10	11	12
1969-70	8.1	3.8	2.3	1.2	0.9	0.7	4.6	4.9	4.6	6.8	5.3	3.7
1968-69	8.9	4.4	3.1	1.8	1.3	1.0	5.2	5.2	5.0	7.4	5.7	3.8
1967-68	10.0	5.2	3.6	2.4	1.7	1.1	6.5	6.2	5.4	8.1	6.0	3.8
1966-67	10.7	5.4	3.9	2.6	2.0	1.2	6.9	6.5	5.8	7.7	6.2	3.8
1965-66	10.8	5.8	4.0	3.0	2.2	1.2	7.2	7.1	6.0	7.8	6.4	3.7
1964-65	11.1	5.8	4.2	3.4	2.4	1.7	7.7	7.3	6.5	8.5	6.6	3.9

Source Code: DOE-1

Table 3.14. **NONPROMOTION BY GRADE GROUPINGS AND RACE,
SCHOOL YEAR 1960-61 (In Percent)**

Grade Groups	Race	
	White	Negro
Grades 1-6	4.41	8.41
Grades 7-9	7.13	9.94
Grades 10-12	5.57	8.31

Source Code: DOE-1

stages at that time. As an indicator of the present situation in Florida's public schools, these figures should be viewed with caution.

The final set of data offered under this objective deals with the post-secondary educational activities of Florida's graduating seniors (Table 3.15). There has been an overall increase between 1962 and 1970 in the proportion of high school seniors entering universities or colleges. However, while enrollment in four-year institutions dropped by almost five percentage points between 1962-1970, the percentage of high school graduates enrolling in junior colleges almost doubled. Technical, trade and other specialized school enrollment fluctuated over the years. Two years, 1968 and 1970, had a lower proportion in these specialized schools than in the base year. In 1964 there was little change and four other years had higher proportions. The differences, however, were slight. Generally speaking, there has been an increase in the percent of high school graduates entering some type of post-secondary institution.

This section has presented data from a variety of sources on factors indicative of the communication and learning skills of Florida pupils. The performance of ninth grade pupils on standardized tests (SCAT) was substantially below the national average. Sex differences in performance seemed to be minimal, with female students doing better than males in English. School size was also positively associated with the test performance of ninth grade pupils. Selective Service data indicate that Florida was above the national average in the percent of draftees failing preinduction and induction mental tests. Florida also exceeded the national

Table 3.15. PERCENT OF FLORIDA HIGH SCHOOL GRADUATES PARTICIPATING IN POST-SECONDARY EDUCATION OR TRAINING, 1962-1970

Entered	Year										
	1970	1969	1968	1967	1966	1965	1964	1963	1962		
College or University	54.57	55.75	55.31	53.97	54.66	51.48	49.74	(2)	45.50		
1) Junior College	31.04	31.77	32.53	32.35	31.33	27.04	24.09	(2)	17.20		
2) Four-year	23.53	23.98	22.78	21.62	22.33	24.44	25.65	(2)	28.30		
Technical, trade, or other	5.11	5.74	4.23	5.64	5.78	5.43	5.23	(2)	5.21		
No Continuation ¹	40.32	38.51	40.41	40.39	40.56	43.09	45.03	(2)	49.29		

Source Code: DOE-3

¹"No Continuation" refers only to those persons who did not immediately following graduation enroll in some formal educational or training program.

²Not Available

average in the extent of illiteracy found in the state. This was affected by the high rate for nonwhites, the rate for whites being much lower than the national figure. The difference between the races in Florida has been narrowing and the state's position in relation to the nation in the amount of functional illiteracy has been improving. As of 1970, however, functional illiteracy remained a problem among the nonwhite population and, to a lesser extent, in rural areas. Nonpromotion in Florida schools was also considerably higher among nonwhite than among white pupils. The percent of high school graduates has been increasing and, as of 1970, over half went on to some form of post-secondary education.

CITIZENSHIP EDUCATION

Citizenship education and needs of Florida pupils are difficult to assess. Reliable information is scarce and there are few direct measurements. Most of the data available often relate to citizenship only indirectly.

On the assumption that "good citizens" vote, the registration and voting characteristics are presented in Tables 3.16 and 3.17. Florida's voting record in the 1968 national election (Table 3.16) shows that just over half of those eligible to vote went to the polls. This was four percent below the national average.

Table 3.16. **PERCENT OF ELIGIBLE VOTERS WHO VOTED IN THE 1968 PRESIDENTIAL ELECTION**

	Percent Voting
Florida	58%
United States	62%

Source Code: OSS

The percent of Florida population of voting age who registered to vote is shown by race in Table 3.17. There was an increase between 1950 and 1960 of about seven percent, due to the increased registration of nonwhites while the registration of whites remained at the same level. In the next decade 1960-70, however, nonwhite registrations increased dramatically while white registrations declined almost four percent. Comparisons by race of those

who actually cast their ballots are not possible as such records are not kept.

Table 3.17. **PERCENT OF PERSONS IN FLORIDA OF VOTING AGE WHO WERE REGISTERED TO VOTE BY COLOR, 1950-1970**

Year	Color		
	Total	White	Nonwhite
1970	64.2	65.4	57.5
1960	65.4	69.3	39.0
1950	58.5	65.3	31.6

Source Code: OSS

While voter registration increased substantially between 1950 and 1970, due almost entirely to the dramatic increase in nonwhite registration, just over half of those eligible to vote cast their ballots in the 1968 Presidential election. Insofar as this is a measure of citizenship, Florida lags behind the nation as a whole. The registration figures by race show that while the percent of white voter registrations had been fairly constant since 1950, dropping somewhat in 1970, the percent of nonwhite voters has increased steadily, and markedly so in the 1960-70 decade.

(Another indirect measure of citizenship could be the extent of crime and delinquency in the state. However, for the purpose of this study, these data would seem to have even greater implications where the moral and ethical values of the state's population are concerned and the discussion of rates relating to such behavior appears in a later section.)

VOCATIONAL INTERESTS

In the school year 1969-70, approximately 22 percent of all students in grades 10-12 were enrolled in vocational educational programs. The largest proportion at this level was in trade and industrial education, which also drew the largest proportion of adult enrollees. For the post-secondary level, the category of office personnel attracted the largest proportion—more than half. Total enrollment in 1970 in vocational education courses at all levels, by occupational class, is shown in Table 3.18.

Table 3.18. **NUMBER AND PERCENT OF ENROLLEES IN VOCATIONAL EDUCATION PROGRAMS BY LEVEL OF ENROLLMENT AND OCCUPATIONAL CLASS, 1970**

Program	Percent Enrolled in			
	Total	Elementary Secondary	Post Secondary	Adult
Agriculture	22,416	19,826	1,713	877
Percent	7.19	28.42	1.49	0.69
Distribution	52,146	12,241	15,581	24,324
Percent	16.73	17.55	13.54	19.18
Trades & Ind.	86,001	25,942	11,581	48,478
Percent	27.60	37.18	10.07	38.23
Health	10,822	599	7,022	3,201
Percent	3.47	0.86	6.10	2.53
Home Economics	7,810	2,181	896	4,733
Percent	2.51	3.13	0.78	3.73
Office	108,528	8,141	61,031	39,356
Percent	34.83	11.67	53.05	31.04
Technical	23,892	839	17,229	5,824
Percent	7.67	1.20	14.97	4.60
Total Enrollment	311,615	69,769	115,053	126,793
Percent	100.00	100.00	100.00	100.00

Source Code: DOE-3

Table 3.19 provides follow-up data on graduates from vocational training programs for 1970. Of those at the secondary level who completed courses and were available for the job market, 79.7 percent found employment in their field of training or related areas. Of the post-secondary group, 86.9 percent found such employment.

If the function of vocational education is to provide skills for jobs in the existing labor market, it is helpful to compare the data in this section with Tables 2.37 and 2.38 in the **Selected Population Characteristics** section of this study. At the post-secondary and adult levels, the greater emphasis on vocational training in the fields of distribution, office, technical and trades categories seems consistent with the changing occupational patterns of the state as shown in Table 2.37. On the secondary level, such a shift is occurring also. It is noteworthy that a high proportion of those who completed their courses at both secondary and post-secondary levels found jobs in their field of study or related areas.

Table 3.19. FOLLOW-UP OF ENROLLEES IN PREPARATORY VOCATIONAL PROGRAMS, IN PERCENT, 1970

Enrollees	Number Completing Program	Placement (In Percent)			Placement Status (In Percent)		
		Continued Full-Time School	Other ¹	Known Employed	In Field of Training or Related Area	Otherwise Employed	Unemployed
Secondary	27,555	28.2	40.2	31.6	79.7	11.1	9.2
Post- Secondary	17,906	5.7	59.1	35.2	86.9	1.4	11.7

Source Code: DOE-3

¹"Other" includes "Status Unknown", "Other Reasons Not in Labor Force", and "Entered Armed Forces." Note: 11,859 completions in Useful Homemaking, OE Code 09.01, not included.

MENTAL AND PHYSICAL HEALTH

Comparable morbidity statistics for whites and nonwhites for the years 1970 and 1960 are given in Tables 3.20 and 3.21. These are based on voluntary medical reports and therefore do not reflect the complete picture. Their greatest value is as a basis for historical comparisons. Table 3.20 shows a considerable dissimilarity to Table 3.21 in the prevalence and to some degree the rank-order of different diseases for whites and nonwhites. A correlation of .764 was obtained between whites and nonwhites when the Spearman rank-order test was applied to the 1970 data in Table 3.20 indicating considerable similarity in disease patterns. A Spearman rank-order correlation of .594 based upon the data in Table 3.21 reveals much greater differences to have existed in the prevalence of certain diseases for the two groups in 1960.

Table 3.20. **RATE AND RANK OF SELECTED DISEASES BY COLOR, 1970¹**

Disease	White		Nonwhite	
	Rate	Rank	Rate	Rank
Aseptic Meningitis	3.1	(7)	13.8	(7)
Chancroid ²	0.5	(10.5)	24.0	(4)
Diphtheria	0.1	(14.5)	0.9	(13.5)
Dysentery, Amoebic	0.2	(12)	0.6	(15.5)
Dysentery, Bacillary	3.0	(8)	12.8	(8)
Encephalitis	0.0	(17.5)	0.0	(18)
Gonorrhea ²	107.2	(1)	1678.0	(1)
Granuloma Inguinale ²	0.0	(17.5)	2.2	(12)
Hepatitis, Infectious	25.0	(2)	18.3	(5)
Hepatitis, Serum	3.8	(6)	2.6	(11)
Lymphopathia Venereal ²	0.1	(14.5)	7.2	(9)
Malaria	0.5	(10.5)	0.6	(15.5)
Meningococcal Infection	1.0	(9)	5.0	(10)
Salmonellosis	14.0	(3)	17.7	(6)
Syphilis ²	9.8	(5)	226.6	(2)
Tetanus	0.1	(14.5)	0.9	(13.5)
Tuberculosis	13.9	(4)	71.3	(3)
Typhoid Fever	0.1	(14.5)	0.5	(17)

Source Code: DHRS-2 1970

¹Rate per 100,000 population

²Venereal Disease

Table 3.21. **RATE AND RANK OF SELECTED DISEASES BY COLOR, 1960¹**

Disease	White		Nonwhite	
	Rate	Rank	Rate	Rank
Aseptic Meningitis	NA	NA	NA	NA
Chancroid ²	0.4	(10)	25.2	(4)
Diphtheria	0.3	(11.5)	6.2	(8)
Dysentery, Amoebic	3.6	(6)	3.3	(11)
Dysentery, Bacillary	1.4	(7)	5.6	(9)
Encephalitis	1.2	(8)	0.8	(14)
Gonorrhea ²	28.8	(2)	1003.5	(1)
Granuloma Inguinale ²	0.0	(15.5)	8.4	(6)
Hepatitis, Infectious	24.6	(3)	13.9	(5)
Hepatitis, Serum	NA	NA	NA	NA
Lymphopathia Venereal ²	0.0	(15.5)	4.1	(10)
Malaria	0.1	(13.5)	0.0	(16)
Meningococcal Infection	0.9	(9)	2.5	(12.5)
Salmonellosis	6.8	(5)	6.9	(7)
Syphilis ²	30.2	(1)	315.7	(2)
Tetanus	0.1	(13.5)	2.5	(12.5)
Tuberculosis	22.5	(4)	56.8	(3)
Typhoid Fever	0.3	(11.5)	0.3	(15)

Source Code: DHRS-2 1960

¹Rate per 100,000 population

²Venereal Disease

Comparison of the two tables indicates an increase in gonorrhea, the rate increasing 3.7 times for whites and climbing over 60 percent for nonwhites. The rate for nonwhites in 1970 was 16 times that for whites. On the other hand, the reported rate for syphilis among whites declined and the rank-order from first in 1960 to fifth in 1970. For nonwhites the rank-order for syphilis remained the same at second. Infectious hepatitis increased among whites and took over second place in the rank-order in 1970. Note that cancer was not included in the tables as comparative data were not available.

The following tabulation shows changes in rates (per 100,000 population) between 1960 and 1970 in a selection of diseases not listed in the previous tables:

Decrease in Rates	1970	1960
Brucellosis	0.0	0.1
Chicken Pox	50.6	114.4
Diarrhea of the Newborn	0.4	3.2
Influenza	562.6	323.7
Measles	22.3	82.7
Tetanus	0.2	0.6
Typhoid Fever	0.2	0.3
Whooping Cough	1.4	8.6
German Measles	52.8	16.8
Malaria	1.0	0.1
Streptococcal Infection	152.0	108.1

The preceding table indicates an overall reduction in Florida disease rates. There are, however, some notable exceptions. Bacillary dysentery showed a marked increase among nonwhites, only a slight increase among whites. Tuberculosis increased more than four times among nonwhites, advancing from fifth to third in rank-order. At the same time the prevalence of this disease among whites decreased and the rank-order slipped from third to fourth. The striking changes in the venereal disease categories and the disproportionate figures for whites and nonwhites call for further consideration.

Disease rates for Florida have shown a steady overall reduction since 1960. However, there has been a substantial increase in the rate of gonorrhea, up 3.7 times for whites and over 60 percent for nonwhites. The rate for nonwhites was 16 times that for whites in 1970. The rate for syphilis decreased for whites but remained about the same for nonwhites. There was also an indication that the highest incidence of venereal diseases was occurring in a younger age group. In most disease categories, differences exist in the rates for whites and nonwhites. Especially noteworthy is this higher incidence among nonwhites of venereal disease, tuberculosis and dysentery. The incidence of tuberculosis declined among whites but increased fourfold among nonwhites in the 1960-70 decade.

Table 3.22 provides a closer look, examining five types of venereal disease by age groups of highest reported incidence, by color. This shows the highest incidence was in an unusually low age group. There is little variation in this respect between the races.

The number and percent of pupils enrolled in specialized health courses in Florida public schools is presented in Table 3.23. The percent is low, particularly at the elementary level. This does

Table 3.22. **VENEREAL DISEASE BY TYPE, COLOR, AND AGE GROUP OF HIGHEST INCIDENCE, 1970**

Disease	Age Groups	
	White	Nonwhite
Chancroid	20-24	25-34
Gonorrhea	20-24	20-24
Granulome Inguinale	None	25-34
Lymphopathia Venereal	35-44	20-24
Syphilis	25-34	25-34

Source Code: DHRS-1 1970

not present the whole picture. Most elementary children receive some instruction in health related courses, usually as part of regular classroom instruction. The number of students receiving instruction in other than specialized health courses cannot be ascertained and therefore is not included.

Table 3.23. **ENROLLMENT IN SPECIALIZED HEALTH COURSES, 1969-70¹**

Grade Level	Students	Percent
Elementary	6,530	0.80
Secondary	30,388	4.41
Total	36,918	2.45

Source Code: DOE-4

¹The table shows the number of students enrolled in specialized health courses at the elementary and secondary levels. Acknowledging that the percentage is low, the majority of elementary students receive health instruction in the self-contained classroom. The number of students receiving instruction in other than specialized health courses cannot be ascertained and therefore are not included in the table.

Table 3.24 presents data on the number of alcohol and narcotic abuse referrals to Florida juvenile courts. It indicates a dramatic increase in the absolute number of referrals between 1962 and 1970. Breakdown by sex and color, available for 1970 only, shows a wide variation between the sexes. These actual figures do not permit comparisons by percent between the races. They cover only actual referrals. While the proportion of juveniles reported for such offenses was relatively small when compared with other types of offenses (See Table 3.34) the increasing significance of this as a mental and physical health problem is suggested.

Table 3.24. **ALCOHOL AND NARCOTIC REFERRALS BY SEX AND COLOR, 1962, 1967, 1970**

Type of Referral by Color	Year		
	1970	1967	1962
Alcohol			
Total	1,884	1,965	562
White			
Male	1,281	NA	NA
Female	202	NA	NA
Nonwhite			
Male	356	NA	NA
Female	45	NA	NA
Narcotics			
Total	636 ¹	141	1
White			
Male	392	NA	NA
Female	134	NA	NA
Nonwhite			
Male	99	NA	NA
Female	11	NA	NA

Source Code: DLE
¹Based on six months

HOME AND FAMILY LIVING

Data on referrals to Juvenile Court for dependency in 1970 are presented in Table 3.25. The major causes for referrals are lack of physical care and lack of financial support. In general, lack of physical care was more common in white referrals and lack of financial support among nonwhite referrals but the differences were not large.

The percent increase in dependency referrals for 1960-70 appears in Table 3.26. The increase for white juveniles, of both sexes, exceeded that for nonwhites. White male referrals were up over 66 percent and white females over 53 percent. Male referrals of both races increased more rapidly than female referrals.

Table 3.25.

**DEPENDENCY REFERRALS TO FLORIDA JUVENILE
COURTS BY REASON, COLOR AND SEX, IN PERCENT,
1970**

Reason	Total (15634)	White		Nonwhite	
		Male (5483)	Female (5183)	Male (2660)	Female (2308)
Abuse ¹	10.72	10.79	12.10	7.81	10.87
Other Neglect ²	84.99	84.53	84.35	87.70	84.40
Other ³	4.27	4.66	3.54	4.47	4.72

Source Code: DHRS-3 1970

¹Includes: Beaten, burned, deprived of food and medical care, all others²Includes: Lack of care of support from parent or guardian, abandonment or desertion, conditions injurious to morals, all other³Includes: Parents violation of probation

Table 3.26.

**PERCENT INCREASE IN DEPENDENCY REFERRALS BY
COLOR AND SEX, 1960-70**

Sex	Color		
	White	Nonwhite	All Races
Male	66.01	39.55	56.38
Female	53.05	17.87	40.09

Source Code: DHRS-3 1970

The percent of Florida's population participating in state welfare programs from 1940 to 1970 is shown in Table 3.27.

Aid to Dependent Children (ADC) increased almost seven times between 1940 and 1950. Although this type of assistance tended to drop in 1960, it again seems to be on the increase in 1970, almost approaching its 1950 level. On the other hand, persons receiving welfare and "Other" categories have shown a persistent tendency to decline since 1950.

The actual numbers of families participating in the ADC program are shown in Table 3.28. As might be expected, the percent of Florida families with children under 18 years of age receiving ADC assistance closely parallels the pattern of participation shown for ADC children in Table 3.27.

Table 3.27. **PERCENT OF FLORIDA'S POPULATION RECEIVING AID FROM THE STATE WELFARE BOARD, 1940-1970**

Recipients	Year			
	1970	1960	1950	1940
ADC ¹	7.2	4.3	8.0	1.2
Other ²	1.3	2.5	3.7	2.8
All Classes	3.7	3.1	5.0	2.3

Source Code: DHRS-4, BOC-3 1970, 1960, 1950, 1940

¹ADC percentages were derived by dividing the number of children receiving aid by the state population under 18 years of age

²Includes: Old age assistance, aid to the blind and aid to the disabled

Table 3.28. **FLORIDA FAMILIES RECEIVING ASSISTANCE THROUGH THE AID TO DEPENDENT CHILDREN PROGRAM, 1940-1970**

	Year			
	1970	1960	1950	1940
Number	52,621	24,969	27,413	2,581
Percent ¹	5.7	3.7	8.1	NA

Source Code: DHRS-4 1970, BOC-3 1970, 1960, 1950

¹Percent of families with children under 18 years of age

Table 3.29. **PERCENT OF CHILDREN UNDER 18 YEARS OF AGE IN FAMILIES WITH INCOMES LESS THAN POVERTY LEVEL, 1970**

Total Number of Families	921,769
Families Below Poverty Level	136,017
Average Number of Children in Low Income Families	2.98
Estimated Number of Children in Low Income Families	405,330
Children in Low Income Families as a Percent of All Children Under 18	37.5

Source Code: BOC-3 1970

The estimated number and percent of children from low income families is shown in Table 3.29 (previous page). Low income families are those families classified in the census as below poverty level. For the purposes of the census, income less than poverty level is determined by comparing family income with such factors as family size, sex of family head, number of children under 18 years of age, and farm and nonfarm residence. Table 3.29 indicates that 37.5 percent of all children under 18 are in low income families.

Data on dependency referrals, welfare, and family income have been examined in this section in order to gain an insight into the needs associated with home and family living in Florida. While data of this type gives exceedingly limited coverage to this important area of concern, it has yielded the following information for consideration.

(1) There is a distinct difference in the major causes of dependency referrals by color;

(2) Over the past decade, at least, there has been a marked increase in the number of such referrals;

(3) There has also been a corresponding increase in both children and families receiving Aid to Dependent Children welfare assistance; and, finally,

(4) In 1970, approximately 38 percent of all children 18 years of age and under were members of families with incomes below poverty level.

AESTHETIC AND CULTURAL APPRECIATION

Statistical data relative to this Perennial Objective are either nonexistent or difficult if not impossible to collect. Libraries are available to most Florida school children. Availability of a library, however, is no measure of the number or quality of books on the shelves. The number of persons attending a library throws little light on the extent of library use. These same imponderables apply to the use of state parks, historical sites and other cultural facilities.

In 1967-68, approximately 48 percent of Florida's students were enrolled in humanities-type courses¹. These included literature, art, music and others in which at least one-fourth of the material was drawn from the fields of art, music, literature,

¹Florida Department of Education, Division of Elementary and Secondary Education, Accreditation Section; Bureau of Curriculum and Instruction.

philosophy, cultural history and others of this kind. In 1966, 35 counties reported offering courses in humanities, another 11 reported humanities-type courses and the remaining 21 reported offering both.

MORAL AND ETHICAL VALUES

While crime and delinquency rates, from a legal standpoint, are indicators of citizenship, the kind of behavior these rates represent can be used to assess the moral and ethical needs of Florida learners. On this assumption this section presents a variety of data on the incidence of crime and delinquency in the state, with national comparisons. Table 3.30 lists the incidence of seven major crimes in Florida and the U.S. for 1960 and 1970. Florida consistently exceeded the nation in all categories except auto theft in 1970. Florida also had an increase in all types of crime (as has the nation as a whole), the most dramatic being in the categories of robbery and burglary. Two interrelated factors are suggested for this increase. One is improved reporting of crime statistics. The other is increasing urbanization. Table 3.31, showing crime rates for the same seven types of offenses in Florida's seven largest metropolitan areas, is pertinent to this point. Note that in many but not all categories these rates in SMSAs exceeded those for the state as a whole.

Table 3.30. **CRIME RATES BY TYPE OF CRIME, 1960-1970¹**

Type of Offenses	1970		1960	
	Fla.	U.S.	Fla.	U.S.
1. Murder & nonnegligent manslaughter	12.7	7.8	10.6	5.0
2. Forcible rape	22.2	18.3	8.1	8.9
3. Robbery	186.1	171.5	80.9	51.7
4. Aggravated assault	277.2	162.4	106.9	73.0
5. Burglary	1,561.8	1,067.7	807.1	456.5
6. Larceny over \$50	1,143.1	859.4	353.4	266.0
7. Auto theft	396.6	453.5	187.6	177.6

Source Code: FBI 1970, 1960

¹Known offenses per 100,000 population

Table 3.31. SMSA CRIME RATES BY TYPE OF OFFENSE, 1970¹

SMSA	Murder and Non-negligent Manslaughter	Forcible Rape	Robbery	Aggravated Assault	Burglary	Larceny \$50 and Over	Auto Theft
1. Ft. Lauderdale- Hollywood	14.0	19.2	189.3	193.8	1785.2	1417.0	685.1
2. Jacksonville	18.2	58.2	290.2	430.0	2271.7	1328.1	575.2
3. Miami	15.6	17.0	426.9	421.4	1858.0	1823.0	781.0
4. Orlando	11.2	29.7	104.0	227.8	1776.2	1047.2	202.1
5. Pensacola	8.2	14.0	87.2	176.9	1569.9	1286.0	300.7
6. Tampa- St. Petersburg	9.5	20.2	174.9	260.0	1729.9	980.2	287.4
7. West Palm Beach	12.3	18.4	128.7	346.7	1522.0	1203.7	288.7

¹Source Code: FBI 1970
²Known offenses per 100,000 population

Turning now to juvenile delinquency, Table 3.32 shows that while the percent of 10-17 year olds in the Florida population referred to juvenile courts increased since 1960, the increase in Florida was not as great as in the nation until 1970 when it exceeded the estimated national figure.

Table 3.32. **PERCENT OF 10-17 YEAR OLDS REFERRED TO JUVENILE COURTS, 1960-1970**

Year	U.S.	Florida
1970	4.9 ¹	5.3
1967	4.4	3.8
1964	3.9	3.5
1960	3.2	3.4

Source Code: FSA 1971

¹Estimate of 1970 based on projections

Table 3.33, for comparison, examines the rate of increase in referrals by race and sex. This brings out some interesting variations. The rate of increase was very large for all groups, but was considerably higher for females than for males, for nonwhites than for whites.

Table 3.33. **PERCENT INCREASE IN JUVENILE DELINQUENCY REFERRALS BY SEX AND RACE, 1960-1970**

Sex	Race		Total
	White	Negro	
Boys	217.6	278.8	234.7
Girls	343.9	386.9	494.4
Total	244.3	301.2	259.5

Source Code: DHRS—3 1970

The ten most frequent reasons for referrals to Juvenile Court, for 1960, are shown in Table 3.34. These suggest marked

Table 3.34. THE TEN MOST FREQUENT REASONS FOR REFERRAL TO JUVENILE COURT CLASSIFIED AS DELINQUENCY AS PERCENT OF TOTAL REFERRALS BY RACE AND SEX, 1960^{1,2}

Reason for Referral	Total (21,473)	White		Negro	
		Boys (12,270)	Girls (3,189)	Boys (4,755)	Girls (1,241)
Running Away	14.3 (1)	13.9 (1)	30.2 (1)	4.7 (7)	14.7 (3)
Being Ungovernable	11.3 (2)	7.9 (5)	22.8 (2)	8.0 (5)	29.2 (1)
Larceny, Petty	11.3 (3)	12.4 (3)	3.2 (7)	15.8 (2)	3.5 (8)
Breaking & Entering	11.2 (4)	12.2 (4)	1.5 (10)	17.4 (1)	1.9 (10)
Act of Carelessness or Mischief	10.8 (5)	12.8 (2)	5.9 (5)	10.6 (4)	3.9 (6)
Truancy	9.8 (6)	6.3 (6)	14.4 (3)	12.7 (3)	21.5 (2)
Shoplifting	4.9 (7)	3.2 (9)	7.7 (4)	6.6 (6)	7.7 (4)
Vandalism	4.1 (8)	6.0 (7)	1.6 (9)	1.9 (12)	0.5 (13)
Auto Theft	3.4 (9)	4.8 (8)	0.8 (14)	2.5 (10)	0.1 (20)
Sex Offense	2.6 (10)	1.9 (15)	4.1 (6)	1.9 (12)	7.4 (5)
Unauthorized Use of Auto	1.9 (14)	2.7 (10)	0.4 (18)	1.3 (17)	0.1 (20)
Violation of Probation	1.7 (16)	1.4 (17)	1.7 (8)	2.2 (11)	2.7 (9)
Bike or Motor Scooter Theft	2.2 (12)	2.4 (13)	0.2 (21)	3.5 (8)	0.2 (17)
Injury to Person	2.3 (11)	2.0 (14)	1.0 (12)	3.4 (9)	3.9 (6)

Source: Code DHR-3 1960

¹This table is based upon the number referred and does not adjust for cases dismissed.
²Rank-order of offense is given in parentheses.

Table 3.35. THE TEN MOST FREQUENT REASONS FOR REFERRALS TO JUVENILE COURT CLASSIFIED AS DELINQUENCY AS PERCENT OF TOTAL REFERRALS BY RACE AND SEX, 1970^{1,2}

Reason for Referral	Total (55,731)	White		Negro	
		Boys (26,701)	Girls (10,967)	Boys (13,256)	Girls (4,801)
Running Away	19.6 (1)	19.0 (1)	39.8 (1)	4.7 (8)	17.2 (2)
Larceny, Petty	16.7 (2)	13.7 (2)	14.1 (2)	21.5 (1)	26.2 (1)
Burglary—B & E	11.0 (3)	13.1 (3)	1.9 (10)	17.8 (2)	1.8 (8)
Ungovernable Behavior	7.8 (4)	6.1 (5)	13.0 (3)	5.0 (6)	13.8 (3)
Disorderly Conduct	5.5 (5)	5.1 (7)	2.8 (7)	8.0 (3)	6.5 (6)
Truancy	5.2 (6)	4.3 (8)	6.0 (4)	5.0 (5)	8.3 (5)
Vandalism	4.9 (7)	6.6 (4)	2.3 (9)	4.8 (7)	1.5 (9)
Assault—Aggravated & Not	4.3 (8)	2.7 (12)	1.2 (12)	7.9 (4)	9.6 (4)
Drunkness-Posses.	3.9 (9)	5.6 (6)	4.3 (5)	1.2 (13)	1.0 (10)
Larceny, Grand	3.2 (10)	3.2 (11)	2.3 (8)	3.4 (10)	4.1 (7)
Drugs	2.9 (11)	4.1 (9)	3.9 (6)	0.5 (18)	0.5 (4)
Auto Theft—Unauthorized Use	2.7 (12)	3.4 (10)	0.5 (13)	3.9 (9)	0.4 (15)
Violation of Curfew	1.5 (13)	1.6 (13)	1.8 (11)	1.5 (12)	0.5 (13)
Auto Theft—All Other	1.0 (14)	1.4 (14)	0.2 (15)	1.2 (14)	0.02 (21)

Source Code: DHRS—3 1970

¹This table is based upon the number referred and does not adjust for cases dismissed

²Rank-order of offense is given in parentheses.

variations by race and sex. "Running away" ranked highest for both white boys and girls, significantly so for girls. But this offense ranked seventh for nonwhite boys and third for nonwhite girls. Another look at these rankings in Table 3.35, this time for the year 1970, shows several changes in the order of frequency of referrals. More significantly, referrals for white boys more than doubled in the decade, while those of white girls almost tripled. The rate for nonwhite boys also tripled and that for nonwhite girls quadrupled. This continued a trend that began in 1967 but is not shown here in table form.

Comparison of Tables 3.34 and 3.35 offers interesting contrasts. Shifts in the reason for referral were greater for nonwhite boys and girls. Nonwhite girls followed a pattern of rebelliousness similar to white girls (there was some inversion in the top three ranked reasons). Nonwhite boys, however, exhibited a pattern highlighted by crimes against property in both tables. Both tables include information on categories of delinquent behavior not in the top ten in frequency. The comparison indicates changing behavioral patterns, the most significant being the appearance of drugs as a ranked category for the first time in 1970.

A marked increase in referrals for traffic violations has been shown by Florida juveniles. Table 3.36 provides data on these referrals for 1960 and 1970, by sex and race, with percent increase for each group. Although rates of increase were high for each of the four groups, those for nonwhites and females of both groups were particularly noticeable.

Table 3.36. **TRAFFIC VIOLATION REFERRALS BY RACE AND SEX, 1960-1970**

Year	Total	White		Negro	
		Male	Female	Male	Female
1960	7,515	5,571	744	325	56
1970	14,216	11,177	1,900	963	168
Percent Increase	89.2	100.6	156.5	196.3	200.0

Source Code: DHRS—3 1960, 1970

The increase in the problem of repeaters in the caseloads of juvenile courts is shown in Table 3.37. This examines the number

Table 3.37. REFERRALS PREVIOUSLY KNOWN TO THE JUVENILE COURTS, 1961, 1964, 1967

Year and Type of Offense	Repeated Referrals	Percent of Total Caseload	Percent Increase Over Previous Year
1961			
Delinquency	3,548	16.5	N.A.
Traffic Violation	778	11.4	N.A.
1964			
Delinquency	11,618	37.5	227.4
Traffic Violation	3,102	28.4	298.7
1967			
Delinquency	14,487	37.9	24.6
Traffic Violation	5,248	30.5	69.5

Source Code: DRHS-3 1960, 1970

of referrals of those with previous records in the areas of delinquency and traffic violation for selected years between 1961 and 1967. (Information for 1970 was not available at time of publication.) The number of repeaters in both areas increased in every period reported, both in absolute numbers and in percent of caseload.

Data in the preceding tables on referrals to juvenile court must be assessed with caution. They do not take into account the results of adjudication. While overall dismissal rates can be computed from available juvenile court records (6.1 percent in 1960, 7.5 percent in 1967) there is no way to apply these rates to the categories of offense, race or sex. Juvenile court statistics, in addition, are often inexact. These are not adversary proceedings as in criminal courts. Juvenile judges and staffs have wide latitude in their decisions. With these cautions in mind, the data and trends indicated in these tables are relevant.

Data in the area of illegitimate births also are subject to these limitations. The figures in Table 3.38, however, appear to be the basis for acceptable comparisons. There are large differences between the figures for whites and nonwhites. The rate of illegitimate births in Florida exceeded that for the United States. There was a significant increase in the rate of illegitimacy, up about four times for whites and almost three times for nonwhites in the years between 1930 and 1970. This increase parallels the national figure, although the percent of illegitimate births for Florida exceeded that for the U.S.

Table 3.38. **ILLEGITIMATE BIRTHS AS PERCENT OF LIVE BIRTHS, 1930-1970**

Color	Year				
	1970	1960	1950	1940	1930
Florida:					
Total	15.0	9.6	8.0	6.2	5.4
White	6.5	2.8	1.8	1.5	1.5
Nonwhite	41.1	27.9	23.2	17.4	14.2
United States:					
Total	11.2	5.3	3.9	3.5	N.A.

Source Code: DHRS—1 1950, 1960, 1970

Table 3.39 indicates that the proportion of teenage mothers of illegitimate children is also on the increase. Latest data show more than half were in this age bracket. The proportion of nonwhite teenage mothers has been higher than white teenage mothers in every period reported.

Table 3.39. **ILLEGITIMACY AMONG FLORIDA TEENAGERS (19 YEARS OF AGE AND UNDER) BY COLOR AS PERCENT OF ALL ILLEGITIMATE BIRTHS, 1952-1970**

Color	Year				
	1970	1967	1962	1957	1952
Total	54	51	50	39	40
White	51	46	38	38	34
Nonwhite	56	54	41	39	41

Source Code: DHRS-1 1952-1970

Further light on these racial differences is provided by examination of age groupings of teenage mothers of illegitimate children. The top three ages for whites are, in order, 19, 18 and 17. For nonwhites they are 18, 17 and 16.

Florida in 1970 exceeded the national rates in all major types of crime except auto theft. These rates have been increasing steadily in both state and nation. In the area of juvenile delinquency as measured by referrals to the courts, the increase in Florida has not been as large as in the nation. There have been marked racial differences in this area, the increases being largest among nonwhites of both sexes and among white girls. Referrals of non-white boys were most frequent for crimes against property while behavior problems predominated for white boys. Categories of rebellious behavior among white girls showed significant increases. Traffic violations by juveniles increased sharply between 1960 and 1967. Florida also exceeded the nation in the rate of illegitimate births and its teenage mothers of illegitimate children averaged one year younger among nonwhites than whites.

CHAPTER IV

SURVEY OF DISTRICT EDUCATIONAL PRACTICES

DESCRIPTION AND DEFINITION OF VARIABLES

Three types of information about county school districts constitute the Survey of District Educational Practices¹ described in this chapter. They are both conceptually and operationally distinct and are derived from an approach commonly referred to as system analysis. The three types of information include:

Input	The kind and level of support which school districts provide their schools.
Context	The socioeconomic and cultural characteristics of the school district in which the students are enrolled.
Output	The variety of conventional and non-conventional ² educational consequences presumed to be directly or indirectly attributable to the educational activities of the county school system.

In this chapter the relationships between thirty-seven variables are examined: six input variables, ten context variables and twenty-one output variables. These thirty-seven variables are in no way presumed to be exhaustive. Their choice has been dictated almost solely by three considerations: (1) their availability from secondary sources; (2) their suitability for this type of analysis; and (3) the degree to which they seemed consistent with the objec-

¹This survey is based on the analysis of data derived from all sixty-seven school districts in Florida.

²The distinction between "conventional" and "nonconventional" output is based on whether or not the output can be viewed as academic or school related (test scores, promotion, etc.) or socioeconomic (crime rates, unemployment, etc.)

tives of the **Plan for Study of the Educational Needs in Florida.**

Table 4.1 summarizes the thirty-seven variables included in the analysis according to whether they have been operationally defined as inputs, context, or outputs. Where possible, comparable figures for the United States also have been included. Unfortunately, national data were not available for some variables and were, therefore, omitted from the table. The letters "NA" were used where this occurred. It will be noted in Table 4.1 that Florida is neither uniformly above or below the nation with respect to those variables which one might consider desirable on the one hand or undesirable on the other.

Table 4.1. **SYSTEM VARIABLES**

Variable	Year	Florida	United States
I. Input			
1. Fully Accredited Schools	1970	52.7%	NA ¹
2. Expenditures for Instruction	1970	76.1%	72.0%
3. Classes Taught by Teachers Infield	1970	86.9%	NA
4. Teachers Rank II and Up	1970	27.5%	30.6%*
5. Teachers Rank III and Below	1970	72.5%	69.4%*
6. Pupil-Teacher Ratio	1970	23.6	22.3
II. Context			
1. Negro	1970	15.5%	11.2%
2. Urban	1970	80.5%	73.5%
3. White Collar	1970	49.8%	48.3%
4. Average Family Income	1970	\$10,120	NA
5. Family Income Below Poverty Level	1970	12.7%	9.8%
6. Born in State	1970	37.6%	NA
7. Median Education	1970	12.1	12.2
8. Transfers from Out-of-State	1970	5.1%	NA
9. Transfers from Out-of-County	1970	2.4%	NA
10. Family Income \$15,000 and Up	1970	16.8%	19.2%
III. Output			
1. Enrolled in School, 14-17	1970	90.6%	94.13%
2. Promoted Grades 1-12	1970	96.2%	NA
3. Percent Attendance 1-12	1970	93.3%	93.4%
4. Post Secondary College	1970	54.6%	51.9% ²
5. Post Secondary Vocational	1970	5.1%	NA
6. Post Secondary None	1970	40.3%	NA
7. Juvenile Delinquency ³	1970	3.3%	4.9%
8. Unemployment	1970	3.8%	4.9%
9. Alcohol and Narcotic Referrals	1970	15.7%	NA
10. Truancy	1970	17.9%	NA
11. Divorce Rates	1970	5.5	3.5
12. Dependency Referrals ⁴	1970	0.7%	NA
13. Illegitimate Births	1970	15.0%	11.2%
14. Percent Voting	1970	64.2%	62.0%
15. Verbal Mean Score	1970	29.8%	30.9
16. Quantitative Mean Score	1970	27.6	32.2
17. Social Studies Mean Score	1970	28.2	NA
18. English Mean Score	1970	39.1	NA
19. Math Computation Mean Score	1970	22.7	NA
20. Math Problem Solving Mean Score	1970	21.7	NA
21. Science Mean Score	1970	42.9	NA

¹NA: Not available or not applicable

²Estimate

³Age group 10-17

⁴Age group Birth-17

⁵Equivalent degrees

CORRELATION VARIABLES

Input Variables

1. Percent of the district's schools designated as fully accredited by the Department of Education in 1970 (DOE-4)
2. Percent of the district's expenses devoted to instruction, i.e., staff salaries, textbooks, audio visual equipment, etc., 1970 (DOE-6)
3. Percent of major high school classes in the district taught by teachers in-field, 1970 (DOE-6)
4. Percent of instructional personnel in the district holding a Rank II or higher certificate (Masters Degree or above), 1970 (DOE-6)
5. Percent of instructional personnel Rank III or below (Bachelors Degree) 1970 (DOE-6)
6. Average number of pupils per teacher, based on average daily membership, grades 1-12, 1970 (DOE-6)

Context Variables

1. Percent of county population who were nonwhite in 1970 (BOC-2)
2. Percent of county population classified as urban in 1970 (BOC-2)
3. Percent of employed persons in the county in white collar occupations, 1970 (BOC-3)
4. Average family income for the county, 1970 (BOC-3)

5. Percent of the families in the county with an annual income of less than poverty level, 1970 (BOC-3)
6. Percent of native population born in Florida, 1970 (BOC-3)
7. Median school years completed by persons 25 years old and over in the county, 1970 (BOC-3)
8. Transfers from out-of-state as a percent of total enrollment, grades 1-12, 1970 (DOE-6)
9. Transfers from other counties as a percent of total enrollment, grades 1-12, 1970 (DOE-7)
10. Percent of families with annual income of \$15,000 and over, 1970 (BOC-3)

Output Variables

1. Percent of county population 14-17 years of age enrolled in school, 1970 (BOC-3)
2. Percent of regular district membership promoted at close of 1970 school year, 1-12 (DOE-6)
3. Percentage of the pupils in membership grades 1-12 who were in attendance during school year, 1970 (DOE-6)
4. Percent of public school graduates in the district who entered college, 1970 (DOE-5)
5. Percent of public school graduates who entered technical, trade, or similar schools, 1970 (DOE-5)
6. Percent of public school graduates who did not immediately continue education, 1970 (DOE-5)
7. Percent of juveniles in the county referred to juvenile court for delinquency offenses, 1970 (DHRS-3)

8. Annual average of unemployment rates, 1970 (BOC-3)
9. Percent of juveniles referred to juvenile court for alcoholic and narcotic offenses, 1970 (DHRS-3)
10. Juveniles referred to juvenile court for truancy offenses as percent of children enrolled in school, 1970 (DHRS-3)
11. Divorce rates per 1,000 population, 1970 (DHRS-1)
12. Percent of juveniles referred to juvenile court because of parental neglect, 1970 (DHRS-3)
13. Percent of all live births which were illegitimate, 1970 (DHRS-1)
14. Percent of electors in the county voting of those who were eligible to vote by age and citizenship, 1970 (OSS)
15. Ninth grade standardized tests means (NGTS)

(Source Codes are identified in parentheses. The actual source of information for these variables may be found in the List of Sources and Source Codes, pages viii and ix).

INPUT VARIABLES³

Table 4.2 reports the product-movement correlations which were obtained when each of the six school input variables were run against one another. An inspection of Table 4.2 reveals what seems to be two major "clusters" of relationships which are worthy of special note. The first of these clusters centers around school accreditation. It would appear that school accreditation is rather strongly related to the percentage of classes in the district being taught by teachers in field and to the percentage of teachers working in the district who hold a Rank II certificate and above. It is not, however, very strongly related to how much of the district's

³NOTE: Throughout this chapter, a correlation coefficient of ± 0.316 was chosen as the "cut off" point for determining the strength of the relationship between variables. Correlations closer to zero than ± 0.316 indicate less than ten percent shared variance, which was taken to indicate a weak relationship.

Table 4.2. INPUT INTERCORRELATIONS

Input	Fully Acc. Sch.	Exp. for Inst.	Tch. Infld. 1970	Tch. / Rk. II	Tch. / Rk. III	Pupil- Teacher Ratio
Fully Accredited Schools	—	.123	.475	.403	-.351	.227
Expenditures for Instruction		—	.365	.111	-.101	.513
Teachers Infld 1970			—	.279	-.219	.265
Teachers, Rank II and Up				—	-.980	.040
Teachers, Rank III and Below					—	-.033
Pupil-Teacher Ratio						—

budget is spent for instruction. Expenditures for instruction, on the other hand, does seem to be strongly associated with both the number of classes taught by teachers in field in a district and its pupil-teacher ratio, thus forming the second "cluster." The two "clusters" apparently overlap where teachers in field are concerned since this particular variable is highly related to the key variables in both clusters. The existence of these two overlapping clusters would suggest that the input variables being used in the study, while they are certainly not all inclusive, are identifying to varying degrees, two somewhat different types of school system resources. Considering the nature of the variables involved, the first cluster would seem to be related to the quality of system resources and, the second, although somewhat more indirectly, to the quantity of resources.

CONTEXT VARIABLES INTERCORRELATIONS

Correlations were also run between each of the ten context variables used in the study. The results are reported in Table 4.3 below. Unlike the input variables discussed in the preceding section, we do not find the same clear-cut evidence of clustering but rather, with only a few exceptions, an almost uniformly high set of correlations. A cursory interpretation of this fact would suggest that these variables are measuring slightly different dimensions of district socioeconomic conditions.

OUTPUT VARIABLES INTERCORRELATIONS

Because of the very large number of variables being used to represent district outputs in the study (twenty-one in all), it was necessary to break the intercorrelation matrix which resulted when each of these variables was run against the other into three separate tables. Table 4.4a below, the first of the three tables, contains the correlations produced by the first fourteen of these variables. Table 4.4b contains the results of the correlation of these same fourteen variables with the remaining seven variables which represent student performance on the various sections of

Table 4.3. CONTEXT INTERCORRELATIONS

Context	Negro	Urban	White Collar	Avg. Fam. Inc.	Fam. Income Poverty Level	Fam. Income \$15,000	Born in Fla.	Median Edu.	Trans. From Out-of-State	Trans. From Other District
Negro	—	—	—	-.485	.532	-.279	.529	-.426	-.504	-.074
Urban		-.263	-.358	.883	-.730	.774	-.636	.787	.254	-.612
White Collar			.796	.868	-.710	.787	-.638	.852	.184	-.563
Average Family Income			—	—	-.843	.842	-.798	.871	.370	-.498
Family Income Below Poverty Level					—	-.771	.814	-.880	-.462	.187
Family Income \$15,000 and Up						—	-.590	.752	.266	-.428
Population Born in Florida							—	-.845	-.650	.256
Median Education								—	.445	-.021
Transfers from Out-of-State									—	—
Transfers from Other Districts										—

Table 4.4a. OUTPUT INTERCORRELATIONS

Output	Enrld. 14-17	Prom. 1-12	Attn.	Coll.	Voc.	None	Juv. Del.	Un- emp. Rates	Alc. & Narc. Ref.	Tru. Ref.	Div. Rates	Dep. Ref.	Ille- git.	Vote Per.
Enrld. in School 14-17	—	-.046	-.035	.122	.106	-.165	.043	-.030	-.137	-.017	.301	-.003	.176	.329
Prom. 1-12		—	-.042	-.015	-.237	.101	-.032	.085	-.122	.010	.102	-.007	-.155	.028
Percent Attendance			—	-.001	-.014	.009	-.110	-.027	-.094	.014	.017	-.070	-.005	-.141
Post Secondary College				—	.332	-.946	.319	.287	.229	.118	-.036	.189	-.179	.334
Post Secondary Vocation					—	.006	.027	-.137	.017	.095	-.085	.168	.186	-.143
Post Secondary None						—	-.347	-.256	-.236	-.157	.067	-.259	.126	-.304
Juvenile Delinquent							—	.276	.578	.569	-.045	.732	.126	.311
Unemployment Rates								—	.142	.177	.231	.287	.265	.198
Alcohol. & Narc. Referrals									—	.219	.025	.341	.111	.207
Truancy Referrals										—	.084	.471	.045	.042
Divorce Rates											—	-.097	-.052	.031
Dependency Referrals												—	-.097	.240
Illegitimacy													—	.050
Voting Performance														—

Table 4.4b. OUTPUT INTERCORRELATIONS

Output	Verbal	Quant.	Soc. Std.	Eng.	Math Comp.	Math Prob. Sov.	Sci.
Enrid. in Sch. 14-17	.143	.040	.129	.126	.006	.111	.096
Prom. 1-12	.079	-.052	-.025	-.026	-.047	.031	-.044
Attendance	.023	.136	.149	.162	.143	.160	.123
Post Sec. College	.663	.604	.645	.644	.589	.622	.553
Post Sec. Voc.	-.219	-.128	-.115	-.140	-.130	-.176	-.054
Post Sec. None	-.627	-.595	-.644	-.634	-.578	-.598	-.568
Juv. Delinq.	.423	.410	.404	.416	.403	.320	.395
Unemp. Rates	.294	.322	.314	.287	.376	.275	.324
Alcoh. & Narc. Ref.	.296	.297	.297	.305	.273	.177	.256
Truancy Ref.	.066	.018	.029	.022	-.003	-.021	.067
Divorce Rates	-.032	-.109	-.093	-.055	-.125	-.038	-.115
Dependency Ref.	.325	.343	.275	.293	.320	.251	.283
Illegitimacy	-.398	-.412	-.318	-.258	-.348	-.382	-.274
Voting Performance	.494	.427	.427	.478	.395	.419	.464

Table 4.4c. NINTH GRADE STANDARDIZED TEST INTERCORRELATIONS, 1969-70

	Verbal	Quant.	Soc. Std.	Eng.	Math Comp.	Math Prob. Sol.	Sci.
Verbal	—	.929	.942	.910	.906	.909	.908
Quantitative		—	.950	.936	.952	.951	.920
Social Studies			—	.954	.924	.932	.941
English				—	.898	.916	.940
Math Computation					—	.939	.892
Math Problem Solving						—	.906
Science							—

the state's ninth grade standardized test. Table 4.4c, the final table, contains the results of the intercorrelations among the various sections of the test.

A review of the correlations in all three tables reveals only one clearly defined "cluster" of variables. Evidence of this cluster's existence may be found in tables 4.4b and 4.4c where one can observe the various academic variables such as the percentage of a district's students attending college and student mean scores on the different sections of the ninth grade test to be highly intercorrelated. Interestingly, enrolled in school 14-17, promotion grades 1-12, and percent attendance do not seem to fall within the cluster, while two apparently nonacademic variables, juvenile delinquency and voting performance, seem to be included. Why this is the case is beyond the scope of this paper to speculate upon. It will also be noted that most of the correlations between the remaining variables are rather small, suggesting that they measure largely independent phenomena.

SYSTEMS ANALYSIS

Some insight into the relationships between the educational inputs of a school district and its socioeconomic and racial context can be gained from an inspection of Table 4.5. In Table 4.5, expenditures for instruction, classes taught by teachers infield, teachers with Rank II certificates and above, and, contrary to popular opinion, pupil-teacher ratio, are all found to be strongly and positively associated with percent urban, percent white collar, average family income, median education and the percent of families with annual incomes of \$15,000 or more. On the other hand, the percent of fully-accredited schools in the district is strongly and negatively associated with percent nonwhite, the percent of families in the district with yearly incomes below poverty level, and the percent of the district's population born in the state; expenditures per pupil is strongly negatively related to the percent of families with incomes below poverty level and percent of the population born in state; the percent of classes taught by teachers infield in the district is also strongly negatively related to the percent of families below poverty level; and, finally, the percent of teachers with Rank II certificates and above is negatively but somewhat less strongly related to all of the above context variables. Interestingly, the percent of teachers with Rank III certificates and below (the inverse of Rank II certificates and above), not unexpectedly presents a picture exactly the opposite of that just discussed.

Table 4.5. INPUT VS. CONTEXT

Input	Context							
	Negro	Urban	White Collar	Ave. Fam. Inc.	Fam. Inc. Poverty Level	Fam. Inc. \$15,000	Born in Fla.	Med. Ed.
Fully Accredited Schs.	-.318	.588	.535	.645	-.575	.598	-.441	.448
Expenditures for Instruction	-.041	.626	.493	.529	-.401	.415	-.473	.291
Teachers Infield	-.103	.542	.547	.542	-.416	.476	-.286	.413
Teachers, Rank II and Up	-.001	.300	.373	.393	-.272	.438	-.284	.284
Teachers, Rank III and Below	.026	-.256	-.312	-.367	.255	-.415	.284	-.252
Pupil-Teacher Ratio	-.114	.606	.510	.538	-.432	.455	-.411	.506
								.040
								.291
								.014
								-.033
								-.131
								-.038
								.185
								-.275
								.547
								-.279
								-.275
								-.279
								-.131
								-.038
								.082
								-.459

There is little question after examining the correlations found in Table 4.5 that insofar as "good" education is defined by such things as accreditation, expenditures, and teacher characteristics, there is a definite advantage for Florida children to live in urban, white collar, and high income districts.

Table 4.6a and 4.6b correlates input variables to output variables. Because of the number of output variables involved, the following discussion will be in terms of each of the input variables.

The percent of fully accredited schools is strongly and positively associated with the percent of high school graduates going on to college, student mean scores on the ninth grade test, juvenile delinquency and dependency referrals, and negatively and strongly related to the percent of students *not* immediately going on to some form of post secondary education. School accreditation, on the other hand, does not appear to have a very strong association with the percent of 14-17 year olds enrolled in school in a district, the proportion of the student body in grades 1-12 who were promoted at the close of the 1970 school year, the percent average daily attendance, the proportion of high school graduates going on to vocational education, unemployment rates, juvenile alcoholic and narcotic referrals, truancy, divorce rates, illegitimate births, or voting participation in the county.

The second input variable, expenditures for instruction, is not completely unlike fully accredited schools in that it is strongly and positively associated with the percent of high school graduates going on to college, student mean scores on all portions of the ninth grade test, and voting performance. Conversely, it is strongly and negatively related to the percent of high school graduates *not* seeking any form of higher education. There does not seem to be a very strong relationship between expenditures for instruction and the remaining variables in the table.

The proportion of secondary teachers teaching in those subjects for which they were trained would appear to be related positively and strongly to the proportion of the graduating class seeking a college education, the mean scores on all sections of the ninth grade test and juvenile delinquency and dependency referrals and strongly and negatively associated with the percent of graduating high school students not enrolled in post-secondary education.

With the exception of the strong and positive association between voting performance and the percent promoted 1-12, the percent of teachers with Rank II certificates and above is not strongly related to any other output variable. In fact, the only other

Table 4.6a.

Input	In Sch. 14-17	Prom. 1-12	Conventional Output										
			Attd.	Coll.	Voc.	None	Verb	Quant.	Sec. Std.	Eng.	Math Comp.	Math Prob.	Sci.
Fully Acc. Schs.	256	155	~116	~379	~072	~377	~501	~408	445	398	493	460	423
Exp. for Instr.	040	054	157	437	161	~407	427	372	396	399	393	407	338
Tch. Infield	126	019	~419	014	448	439	448	383	422	378	390	416	340
Tch. Rank II and Up	107	480	170	204	249	130	262	107	156	176	129	160	181
Tch. Rank III and Below	013	486	215	191	285	104	295	100	146	162	121	128	166
Dupl-Tch. Ratio	043	166	~110	251	056	~359	359	254	500	295	283	234	266

Table 4.6b. INPUT VS. NONCONVENTIONAL OUTPUT

Input	Nonconventional Output							
	Juv. Del.	Unemp. Rate	Alch. & Narc.	Tru- ancy	Di- vorce	Depen- dency	Illig. Births	Vote Perf.
Fully Acc. Schs.	.353	.090	.018	.196	-.105	.364	-.046	.307
Exp. for Inst.	.293	.305	.140	.077	.306	.210	-.030	.371
Tch. Infield	.344	.174	-.049	.031	.060	.348	-.153	.248
Tch., Rank II and Up	.196	.013	.054	.160	.086	.069	.144	.439
Tch., Rank III and Below	-.183	.004	-.107	-.161	-.065	-.045	-.089	-.415
Pupil-Tch. Ratio	.307	.113	.175	-.026	.058	.305	-.134	.224

strong relationships remaining in Tables 4.6a and 4.6b are evident between teachers with Rank III certificates and voting performance and percent promoted 1-12 which is negative.

Pupil-teacher ratio is moderately and positively related only to verbal test scores in the district. No strong relationship is found to exist between this and any of the other variables in the table.

Tables 4.7a and 4.7b relate context variables to the conventional and nonconventional outputs of Florida school districts. Since percent of 14-17 year olds enrolled in school, percent average daily attendance, percent promoted 1-12, percent high school graduates enrolling in some kind of vocational education, truancy, unemployment rates and divorce rates are not very strongly related to any of the context variables in Tables 4.7a and 4.7b, only the remaining variables will be considered in detail in the following discussion.

The second variable, percent urban in the county, is positively and strongly associated with the proportion of high school students seeking college, performance on all aptitude and achievement tests, juvenile delinquency referrals, and voting performance. It is strongly and negatively related to the proportion of high school graduates who do not seek post-secondary education.

It will be recalled that Table 4.3, earlier, showed percent white collar and percent urban to be quite highly related. This interrelatedness is evident in its similar association with high school graduates going on to college, aptitude and achievement test performance, juvenile delinquency and dependency referrals, withdrawals, and voting performance. Additionally, white collar seems to be somewhat strongly associated, positively, with the percent of 14-17 year olds enrolled in school in the district. Like urbanity, white collar is negatively and strongly related to the percent of high school graduates not seeking any form of post secondary education.

The amount of average family income, median education and the proportion of the county population earning \$15,000 or more are all associated with school outputs in somewhat the same way. Specifically, they are positively and strongly related with the percent of high school graduates attending college, ninth grade test performance, juvenile delinquency and dependency referrals (with the exception of family income of \$15,000 or up), and voting performance. In addition, families with an income of \$15,000 or up is positively related to school promotion rates, 1-12, and median education is positively associated with juvenile alcohol and narcotic referrals. The same three context variables are negatively and strongly associated with the percent of high school graduates not

Table 4.7a. CONTEXT VS. CONVENTIONAL OUTPUT

Context	In Sch. 14-17	Conventional Output											
		Prom. 1-12	Attn.	Coll.	Voc.	None	Verb.	Quant.	Soc. Std.	Eng.	Math Comp.	Math Prob.	Sci.
Negro	160	-012	124	-305	139	275	-689	-680	-615	-508	-633	-617	-636
Urban	174	108	-070	593	-176	-568	642	556	588	567	577	559	524
White Collar	312	231	-009	602	-168	-581	759	665	740	725	674	719	701
Ave. Fam. Inc.	142	244	-154	621	-218	-383	814	702	754	705	722	720	701
Fam. Inc. Below Pov. Lev.	-210	-213	-219	-486	-653	460	-709	-550	-625	-451	-585	-551	-589
Fam. Inc. \$15,000 and Up	241	339	194	549	-271	469	613	446	529	491	486	494	460
Pop. Born Fla.	-058	-082	158	-521	172	510	-716	-695	-715	-662	-687	-642	-710
Med. Ed.	226	139	-085	600	-135	-590	771	684	729	691	653	651	695
Tris From Out-State	-274	-076	-159	300	140	-269	473	474	440	428	448	319	407
Tris from Other Dist.	-269	-048	-186	-417	160	388	318	-327	-329	-409	-360	-383	-366

Table 4.7b. CONTEXT VS. NONCONVENTIONAL OUTPUT

Context	Nonconventional Output							
	Juv. Del.	Unem. Rate	Alch. & Narc	Tru- ancy	Di- vorce	Depen- dency	Illeg. Births	Voting Perf.
Negro	-.176	-.311	-.199	-.038	.055	-.240	.703	-.202
Urban	.524	.181	.248	.149	-.028	.408	.103	.437
White Collar	.494	.286	.177	.128	.005	.386	-.195	.473
Ave. Fam. Inc.	.505	.244	.282	.096	-.027	.392	-.221	.497
Fam. Inc. Below Poverty Level	-.485	-.314	-.262	-.179	-.015	-.344	.166	-.423
Fam. Inc. \$15,000 and Up	.380	.155	.250	.101	.004	.267	-.119	.392
Pop. Born in Fla.	-.565	-.299	-.434	-.161	.025	-.438	.085	-.517
Med. Educ.	.593	.239	.376	.228	.025	.408	-.112	.520
Trfs. from Out-of-State	.363	.305	.466	.080	-.008	.310	-.222	.281
Trfs. from Other Districts	-.232	.109	-.145	.143	-.029	-.167	.011	.344

seeking any form of post secondary education.

The proportion of families in the county earning less than poverty level is positively and strongly associated with the percent high school graduates *not* seeking immediate post secondary. It is negatively and strongly associated with the proportion of high school graduates seeking college, performance on the ninth grade test, juvenile delinquency and dependency referrals, voting and, to some extent, unemployment rates.

The percent of the county population born in Florida is particularly interesting in that the output variable with which it is positively and strongly associated is not desirable, i.e., not going on to immediate post secondary education. It is negatively and strongly associated with the percent of high school graduates seeking college, aptitude and achievement test performance, juvenile delinquency, dependency and alcohol and narcotic referrals, and voting.

The percent of enrollment in a county transferring from out of state is positively and strongly associated with ninth grade test performance, juvenile delinquency and alcohol and narcotic referrals. However, it does not seem to be strongly related, on the negative side, to any output variable. In contrast to this, the proportion enrolled in school who are transfers from other Florida districts is not strongly associated on the positive side, with any output variable that can be considered desirable. It is strongly and negatively associated with performance on the ninth grade test, the proportion of high school graduates seeking college, and voting.

PARTIAL CORRELATIONS

Partial correlation is a statistical technique which permits one to observe the degree of association between two variables while at the same time controlling for the influence of another or third variable. Such an analysis is carried out in Table 4.8. In the table, the primary or original relationships are given in the first column and the various control or third variables across the top. Our interest is to see whether or not the primary relationship is reduced significantly after removing the influence of the control variable.

As can be seen in Table 4.8, with the exception of the association between teachers Rank II and the two output variables,

Table 4.8. ASSOCIATION BETWEEN INPUT AND OUTPUT AFTER CONTROLLING FOR CONTEXT: SELECTED PARTIAL CORRELATIONS

Primary Relationship	Context Variable				
	Primary Relationship ¹	Urban	Negro	White Collar	Ave. Fam. Income Median Education
A. Fully Acc. Schools vs.					
1. Verbal Mean	.501	.199	.410	.173	.273
2. Quantitative Mean	.408	.121	.270	.083	.170
3. Attend. College	.379	.047	.312	.084	.114
4. Promotion 1-12	.353	.065	.318	.121	.121
5. Delinquency Referrals	.364	.168	.313	.201	.222
6. Dependency Referrals	.364	.168	.313	.201	.222
7. Voting	.364	.168	.313	.201	.222
B. Expenditures for Instruction vs.					
1. Verbal Mean	.427	.042	.551	.093	.007
2. Quantitative Mean	.372	.037	.470	.068	.021
3. Attend. College	.437	.105	.446	.202	.161
4. Promotion 1-12	.437	.105	.446	.202	.161
5. Delinquency Referrals	.437	.105	.446	.202	.161
6. Dependency Referrals	.437	.105	.446	.202	.161
7. Voting	.437	.105	.446	.202	.161
C. Classes Taught by Tch. Infield vs.					
1. Verbal Mean	.439	.141	.511	.044	.208
2. Quantitative Mean	.383	.117	.455	.051	.164
3. Attend. College	.419	.144	.409	.135	.225
4. Promotion 1-12	.344	.084	.333	.101	.135
5. Delinquency Referrals	.348	.165	.335	.167	.216
6. Dependency Referrals	.348	.165	.335	.167	.216
7. Voting	.348	.165	.335	.167	.216
D. Teachers, Rank II and Up vs.					
1. Verbal Mean	.439	.141	.511	.044	.208
2. Quantitative Mean	.383	.117	.455	.051	.164
3. Attend. College	.419	.144	.409	.135	.225
4. Promotion 1-12	.344	.084	.333	.101	.135
5. Delinquency Referrals	.348	.165	.335	.167	.216
6. Dependency Referrals	.348	.165	.335	.167	.216
7. Voting	.348	.165	.335	.167	.216
E. Pupil/Teacher Ratio vs.					
1. Verbal Mean	.359	.049	.389	.050	.057
2. Quantitative Mean	.359	.049	.389	.050	.057
3. Attend. College	.359	.049	.389	.050	.057
4. Promotion 1-12	.359	.049	.389	.050	.057
5. Delinquency Referrals	.359	.049	.389	.050	.057
6. Dependency Referrals	.359	.049	.389	.050	.057
7. Voting	.359	.049	.389	.050	.057

¹Variance accounted for in primary relationship less than 10%. See Tables 4.6a and 4.6b.

promotion 1-12 and voting, the introduction of controls for urban, white collar, average family income and median education virtually eliminates the earlier perceived relationships between school inputs and outputs. On the other hand, the variable Negro does not seem to have a comparable effect.

For example, controlling for the proportion of the county population that is urban eliminates the original (primary) strong relationships between fully accredited schools and verbal mean on the ninth grade test. Likewise, the once strong relationship between the percent of expenditures going for instruction and the percent of those students going on to college is reduced considerably when the variable, average family income is being controlled. Similar effects of this nature are evident throughout the table.

In contrast when controlling for the context variable, Negro, the relationships between the input variables and output variables are not greatly influenced. As can be seen the primary relationship between fully accredited schools and the verbal scores of the ninth grade test of .510 is not significantly reduced with the introduction of the context variable, percent Negro.

It is evident from Table 4.8 that not all the possible partial relationships that could be considered in this study have been included. However, given the partials that have been considered and the primary correlations discussed in the preceding section, a basic pattern is apparent. The general pattern is that Florida schools in counties which are predominantly white, urban, well educated and have large numbers of their population drawn from states other than Florida, "adequately" meet the educational needs of their children. Those Florida schools in counties having the opposite context characteristics tend not to have schools which are comparable.

SUMMARY AND CONCLUSIONS

To summarize the information provided by the preceding tables is difficult. However, it does seem reasonable that:

- 1) What goes into school systems in Florida is largely a function of their environment. Specifically, those schools located in counties which are more urban, white collar occupationally, higher median education and with a larger proportion of their families earning \$15,000 or better, are more likely to have what

is generally felt to be better educational opportunity, e.g., accreditation, better qualified teachers, and teachers qualified to teach in the appropriate subjects.

2) When the same input variables are considered, a positive correlation of less magnitude is evident between fully accredited schools and the percent of 14-17 year olds in school, percent promoted 1-12, college attendance and the percent in attendance during the 1970 school year. This can also be said of the input variables, teachers with a Rank II certificate or higher and teachers teaching in the subject area for which they have been trained (except for promotion, attendance, and in the case of teachers teaching in the area for which they have been trained, college attendance).

3) Nonconventional educational outputs, such as unemployment rates, alcohol and narcotic referrals, truancy, divorce rates and illegitimacy rates are not very strongly related to school inputs, while, delinquency and dependency referrals, and voting performance are only selectively associated to certain district inputs. Thus, by and large, such outputs do not seem to be directly associated with educational resources.

4) Contexts (social characteristics of the county) seem to be most highly related to the school outputs considered in this study. Specifically, a district which is more urban, occupationally white collar, having a higher average family income and education is more likely to have a school system with "desirable" conventional outputs such as college going and higher performance on academic achievement tests.

5) Like the conventional output measures, the nonconventional output variables are most clearly related to the context variables. Thus, a county that is more urban and occupationally white collar, with higher median education and average family income is more likely to have a higher number of juvenile delinquency and dependency referrals, but a lower rate of illegitimacy. So, also, voter participation is apparently related to occupational structure, urbanity and median education of the county.

6) The Negro population of Florida counties is obviously a very significant factor in the output of school systems, although apparently not particularly significant in terms of input (except for the percent of fully accredited schools). Cognitive skills are appreciably lower in county school systems with larger proportions of nonwhites, as is the percentage going on to any form of higher education beyond high school.

7) A most significant factor in the relationship of context to input and output is the effect of native born Floridians in the

county population upon inputs and outputs of the school system. It is negatively associated with every input measure, except the proportion of teachers with Rank III certificates or lower. These native Floridians are, of course, more Negro, rural, and of low income than non-natives which probably explains in part the poor outputs obtained by school systems in counties where they are in greater numbers.

Therefore, on the basis of the data it would appear that:

a) Florida education is probably most relevant for white individuals living in the more developed counties. It is not relevant for Negro, rural, or poor people;

b) The locus of individual differences and motivation for learning lies in large measure *not* in the school system (although it certainly contributes), but in the larger community's values and beliefs regarding the role of education; and

c) Nonconventional "outcomes" of education, such as delinquency, divorce, illegitimacy, etc., are not very strongly school related but, rather, in large measure have their origins in the community.

CHAPTER V

IDENTIFICATION OF CRITICAL LEARNER NEED

The information presented in the three preceding chapters provided an overview of the Florida population and learner status in the seven broad behavioral areas important to education. Once this information had been assembled, the focus shifted to the primary purpose of the study spelled out in the opening sentence on the first page of the report, that is, the identification of the critical educational needs of the state as a whole and the critical needs of the various geographic groups within the state. The planning task force had recognized the importance of this step and set up guidelines for the process. The guidelines were followed closely in the implementation.

The first step was a refinement of the mass of data, discarding those which did not contribute meaningfully to the objectives of the study. This was done by a committee consisting of a coordinator and three specialists with research experience in the fields of education and sociology. When their task was completed the result was submitted to an evaluation panel organized to identify the critical areas of need (see Appendix C). Great care was taken in the selection of this group, as it was with all those associated with the study (see pages 3-4). The evaluation panel spent two days studying the refined data. The outcome was identification of eight critical needs areas, the data collected to identify such need areas and the target populations described below.

CRITICAL NEED AREA 1

Florida's learners need to acquire the basic language and quantitative skills and knowledge which will enable them to deal competently with the usual kinds of intellectual and learning tasks expected of them both in and out of school.

Status Data	Page
Student performance on standardized tests of aptitude and achievement	43-48
The performance of Florida draftees on Selective Service mental and aptitude tests	48-50
Nonpromotion rates in Florida schools	53-55
Target Population Characteristics	Page
Blacks	53, 55, 94-97
Rural residents	94-97
Low socioeconomic status	94-97
Born in the state	94-97
Students who are over age for grade level	43-46
Students from small schools	47

CRITICAL NEED AREA 2

Florida's learners need to realize the functional importance of the preparatory skills and knowledge which can be gained through the formal educational process and to develop the kinds of attitudes that will, in turn, lead to their continued participation in school at least through the twelfth grade or its equivalent.

Status Data	Page
Educational attainment of the Florida population	51-52
The association of income and education	32-34, 85
The relationship between education and occupational status	85
The relationship between education and unemployment	94-96

Target Population Characteristics	Page
Black	51-52, 85
Rural residence	85
Low socioeconomic status	29, 32, 34, 85

CRITICAL NEED AREA 3

Florida's learners need to acquire, prior to entering the first grade, the experiential background which will enable them to participate successfully in the formal educational process.

Status Data	Page
Excessively high nonpromotion rates in the first grade	53-55

Target Population Characteristics

(Data which are currently available indicate that nonpromotion at the first grade level is not selectively associated with specific population characteristics. However, a correlation of $-.387$ between first grade nonpromotion across districts and the percent of their first graders, who had kindergarten experience the preceding year, would tend to suggest that preschool experiential background plays a desirable role in school success.)

CRITICAL NEED AREA 4

Florida's learners need to develop the appropriate attitudes and citizenship skills which will lead them to understand more fully and to assume actively the role of responsible members of a democratic society.

Status Data	Page
Voter registration and voter performance	57-58
Illegal or criminal behavior	69-70
Selected types of delinquent behavior	71-76

Target Population Characteristics	Page
Black	57-58, 71-76, 94-97
Low socioeconomic status	94-96
Born in state	94-96

CRITICAL NEED AREA 5

Florida's learners need to develop the appropriate attitudes and requisite vocational skills which will enable them to successfully respond to current and anticipated demands of local, state and national job markets.

Status Data	Page
Trends in industrial and occupational groups of employed persons	34-38
Unemployment rates	38-39
Enrollment in vocational educational programs	58-59
Occupational placement success of vocational program participants	59-60

Target Population Characteristics	Page
Black	36, 38-39, 85, 96
Rural residence	85, 96
Teenage population	38-39
Low income and low occupational status	85, 96

CRITICAL NEED AREA 6

Florida's learners need to acquire the attitudes and health habits essential to the maintenance of good mental and physical health.

Status Data	Page
Juvenile referrals for narcotics and alcohol abuse	64-65

Morbidity statistics	61-64
Infant and maternal mortality	17-18
Homicide and suicide rates	18-19, 69-70

Target Population Characteristics	Page
--	-------------

Black	18-19, 61-64, 94, 96
Rural residence	94, 96
Low occupational status	94, 96
Male	65

CRITICAL NEED AREA 7

Florida's learners need to acquire the interpersonal and social skills and attitudes which are essential in establishing and maintaining stable, responsible family relationships.

Status Data	Page
Divorce statistics	23-26
Referrals to juvenile court because of dependency	65-66

Target Population Characteristics	Page
--	-------------

Black	23-26, 66, 94, 96
Urban residence	94, 96
Low economic, occupational and educational status	94, 96
Female	23-26

CRITICAL NEED AREA 8

Florida's learners need to develop the kinds of social attitudes and values that will lead to the adoption of behaviors acceptable to the moral and legal codes of contemporary society.

Status Data	Page
Crime and delinquency rates	19, 69-76
Selected dependency referral data	65-66
Illegitimate birth rates	76-77

Target Population Characteristics	Page
Black (selected items)	19, 71-77, 94, 96
White, (selected items)	71-76
Low income, occupational and educational status, (selected items)	94, 96
Males	71-75
Females, (selected items)	71-77

The panel listed no critical need areas under the perennial objective "Aesthetic and Cultural Appreciation." This does not indicate a lack of need but rather is due to a lack of usable data upon which to base an evaluation of learner status. In some other categories the data were not complete. Consequently, in such instances, the evaluation relied on information that was suggestive rather than definitive.

CHAPTER VI

PROJECTION

Much was learned from Florida's first, full scale, formal assessment of educational needs which this report has summarized. Not only did it produce a quantity of relevant and useful data but valuable experience as well with respect to the "do's" and "don'ts" of such an assessment. The superabundance of information already collected to describe various aspects of Florida's population was a surprise to those engaged in the study. However, not all of this data was found usable, either because of the form in which they were reported or because of certain reservations held about the manner or condition under which they were collected. Perhaps one of the most valuable spinoffs of the study was the recognition by the Florida Department of Education of the desirability of a viable, uniform data base for the continuous assessment of learner needs, which in turn, stimulated the development of the "Florida Needs Assessment Information and Statistical Support System." This information system, including data base and statistical routines, is expected to play a vital role in the future assessment and evaluation activities of the state.

The future of statewide assessment of educational needs is assured by the Legislature and it is hoped that much of the experience gained in this initial activity will be of some use in the state supported assessment program now under way. It is obvious that needs assessment is not a terminal activity. The wealth of data produced is still being reviewed and analyzed. A review of both the strategies and the variables used in this analysis will continue, looking toward further assessments of wider scope, including more sophisticated methods of analysis to explore in greater depth those relationships that exist between the educational systems inputs, contexts and outputs, hopefully, will be developed.

In sum, the Title III Needs Assessment Study accomplished two things: (1) it provided the first formal in-depth survey of the critical needs of Florida learners to be conducted in the state and, (2) it provided the base for a continued and expanded assessment program to assist in bringing a meaningful educational program to the learners in Florida.

The importance of these objectives, not only for the learners but for the total population of the state, is clearly set out by a group of authorities:

"Educational attainment and opportunity are linked in many ways. Abundant evidence supports the view that education affects income, occupational participation, social deviance, etc. Indeed, educational attainment is related to opportunity in so many ways that the two terms seem inextricably intertwined in the minds of the layman and in the findings of the social scientist."

Levin, Henry M., et. al.
School Achievement and Post-School Success.
Review of Educational Research,
February, 1971, p. 14.

APPENDICES

APPENDIX A

PLAN FOR STUDY OF EDUCATIONAL NEEDS OF FLORIDA

I. OVERVIEW OF THE PLAN

This plan assumes that the ultimate outcome of this study will be a report including the following sections

A. Status of education, K-12 in Florida, with respect to achievement of the following perennial objectives

1. Communication and learning skills
2. Citizenship education
3. Vocational interests
4. Mental and physical health
5. Home and family relationships
6. Aesthetic and cultural appreciations
7. Moral and ethical values

B. Evaluation of current educational programs in terms of certain major criteria

1. The relevance of educational programs for Florida now and in the future
2. The relevance of educational programs for selected sub-populations within the state
3. The effectiveness of educational programs in (a) providing for individual differences and (b) providing motivation and skill for self-directed, continued learning
4. Comparison of Florida's status in education with that of other states

C. Identification from (B) of critical needs for education in Florida, K-12

Based on the foregoing assumptions, the work of the planning team consisted of these steps:

1. Each perennial objective (A.1-7 above) was broken down into certain behaviors expected of persons who have completed schooling and sought in the educational program. These behaviors are believed indicative of satisfactory accomplishment of the objective. The complete list of behaviors as developed by the planning team follows:

a. Communication and Learning Skills

- 1) Reads, writes, speaks and listens in standard (acceptable) English
- 2) Reads, writes, speaks and listens in a second language
- 3) Uses effectively many sources of information in his learning activities
- 4) Applies rational processes in arriving at the solutions of problems
- 5) Continues learning on his own initiative
- 6) Demonstrates understanding of the basic concepts of mathematics, science, and social studies

b. Citizenship Education

- 1) Exhibits understanding of democratic processes
- 2) Participates in civic enterprises
- 3) Exhibits concern for the welfare of others
- 4) Discharges civic responsibilities (obeys laws, pays taxes, supports improvement of government)

c. Vocational Interests

- 1) Exhibits knowledge of
 - a) Broad expanse of job opportunities
 - b) Sources of employment information
 - c) Laws and regulations pertinent to employment
 - d) Economic and social conditions of employment
- 2) Exhibits respect for all honorable occupations
- 3) Chooses vocational interest appropriate to his aptitudes, abilities, and life goals
- 4) Chooses an educational program appropriate to vocational interests
- 5) Remains in occupation and job for reasonable periods
- 6) Exhibits accuracy, dependability, and command of basic skills in work experience

d. Mental and Physical Health

- 1) Exhibits objective judgment concerning ordinary life situations
- 2) Exhibits self-actuating behavior in daily events
- 3) Reacts to events with appropriate emotional demonstrations
- 4) Works hard and purposefully to optimum levels
- 5) Accepts self honestly and objectively
- 6) Respects beliefs and actions of others
- 7) Remains relatively free of preventable disease and illness

- 8) Meets minimal health standards for occupational and educational enterprises
- 9) Exhibits knowledge of health services in his community
- 10) Exhibits appropriate physical and mental vigor
- 11) Recognizes health hazards
- e. Home and Family Relationships
 - 1) Respects the role of the American family in American society
 - 2) Seeks to maintain for the family an economic level at or above an acceptable minimum (as defined in the poverty program)
- f. Aesthetic and Cultural Appreciations
 - 1) Uses systematically collected and preserved resource materials to promote cultural and aesthetic appreciation (libraries, museums, historical sites)
 - 2) Participates in and/or observes the performing arts and sports
 - 3) Appreciates and utilizes the natural resources of the state
 - 4) Interacts positively with individuals of other cultures or subcultures
- g. Moral and Ethical Values
 - 1) Exhibits respect for such values as beauty, righteousness, love of country, respect for the rights of others
 - 2) Relates to others effectively
 - 3) Respects the religious beliefs of others
- 2. Questions to be answered regarding the development and status of each behavior were listed and are

included by key numbers (behavior number, question number) in the appropriate section below. The entire list of perennial objectives, behaviors, and questions is reproduced in Appendix I.

3. Schedules (see section II) for collection of data pertaining to the questions were developed for these procedures of the study:
 - a. Review of data already available
 - b. A poll of opinions held by selected groups
 - c. A survey of a representative sample of schools
4. A plan for analysis and evaluation of these data and a time schedule for the project were prepared and are included herewith.

This proposed study is being supplemented by a comprehensive study of the migrant population and the educational needs of migrant children. This study is being funded under the migrant section of Title I.

II. DESCRIBING PRESENT EDUCATION IN FLORIDA

A. Suggested Procedures for Collecting and Analyzing Available Data

Much data concerning the status of education in Florida are available. These data are the results of many different studies and data collection procedures undertaken by local, state, and national public and non-public agencies. The first step in the study to assess the educational needs of Florida will be the bringing together of all such data and using these data to answer questions which will assist in arriving at what the situation is now, what it should be, and how do we get from where we are now to where we should be.

This phase of the study would be done by a coordinator who would have the overall responsibility for the total study and a team of at least three people. Team members

should have competencies in measurement, research design, statistics, and data analysis.

The team would be guided in the collection of data by questions listed under the following behaviors and the suggested sources of data to be used in answering the questions.

In structuring the data the team should use simple formats that describe the sources and validity of the data used and the method of analysis. The data should be structured according to the objectives, the behaviors listed under each objective, and the questions answered concerning each behavior. Reports should represent findings in appropriate, graphic forms.

1. Questions describing general characteristics of Florida's population pertinent to the study of educational needs are as follows:
 - a. What is the density of population by county?
 - b. How is population distributed (using ranges critical to educational planning in Florida), i.e., rural (less than 2,500), etc.?
 - c. What are the ages and sex of Florida's population? (5-year intervals: 0-4 through 70-74, then 75+)
 - d. How is Florida's population distributed by race? (Caucasian, Indian, Negro, Oriental, combinations)
 - e. How is Florida's population distributed by religion?
 - f. How is Florida's population distributed by languages spoken at home? (English, only; Spanish, only; English and Spanish; etc.)
 - g. How is Florida's population distributed by years in residence?
 - h. How is Florida's population characterized by selected changes?
 - 1) Births

- 2) Deaths
 - 3) Loss to armed forces
 - 4) Migration: incoming
outgoing
- i. How is Florida's population distributed by citizenship? (native born, naturalized, alien)
 - j. What are the national extraction and ethnic sub-cultures in Florida and how is population distributed among them?
 - k. What is the marital status of Florida's population? (single, married, separated, divorced, remarried, widowed)
 - l. How is Florida's population distributed by families and/or households?
 - m. How is Florida's population distributed by home occupancy? (own, rent)
 - n. How is Florida's population distributed by family income?
 - o. How is Florida's population distributed by personal income?
 - p. How is Florida's population distributed by employment? (farming, construction, government, etc.)
 - q. How is Florida's population 25 years and over distributed by years of school completed?
 - r. How is Florida's population under 25 years distributed by school enrollment? (private/public/other non profit; nursery, kindergarten, primary grades, intermediate grades, Jr. high, Sr. high, college lower-division, college-upper division, graduate school, adult education, etc.)
2. Suggested questions keyed to the behaviors and sources of data for answering these questions are as follows:

COMMUNICATIONS AND LEARNING SKILLS

Questions:

1.1 What percent of the people cannot gain satisfactory employment because of lack of communications skills?

1.2 What percent of draftees and volunteers are rejected by the armed services because of lack of communications skills?

1.3 What percent of pupils are above, at, and below national norms on standardized tests in reading and English?

1.4 What percent of drop outs are above, at, and below national age norms in reading and English?

1.5 How is literacy distributed among population sub-groups?

1.6 How many who are not literate in English are literate in another language?

2.1 What percent of the out-of-school population can communicate in a second language?

Sources of data:

U.S. and Florida
Employment Services

U.S. Department of
Labor

State and Local Adult
Vocational Agencies

Armed Services
records

Standardized test results

ESEA Title I reports

State and local drop-
out studies

Census

Standardized test
results

Federal, state, and
local government
agencies

Local school system
studies

Census

U.S. and Florida
Employment Services

2.3 What percent of the school population is learning to communicate in a second language?	State and local enrollment studies
3.1 What percent of the population has libraries available? What percent uses them?	State and local library studies, both educational and non-educational agencies
3.2 How does Florida compare in book sales, newspaper and magazine sales, and TV and radio audiences?	Bureau of Economic and Business Research Advertising agencies
4.1 How do students perform on sections of standardized tests emphasizing application of facts, concepts, and processes?	Standardized test results
4.7 How competent is the out of school population to detect propaganda, evaluate sources, detect bias, and analyze issues?	National Council for the Social Studies
4.5 Is the school day organized to encourage individual work on problem solving in all areas of learning?	Accreditation reports
5.1 What percent of the out of school population is enrolled in voluntary educational programs?	State and local adult vocational education agencies
5.3 What percent of the population make use of supplementary educational programs such as zoos, museums, and art galleries?	State and local agencies administering such
5.4 What percent of drop outs later continue in educational programs?	State and local studies of drop outs

- | | |
|--|--|
| 5.5 What percent of high school graduates continue formal education? | USOE, NEA, Board of Regents, State and local adult vocational agencies |
| 5.6 What opportunities are available for continued learning for the disadvantaged? | USOE, OEO
State and local adult vocational education agencies |
| 6.1 What percent of students are above, at and below national norms on standardizational tests in mathematics? | Standardized test results |
| 6.2 What percent of students are above, at, and below national norms on standardizational tests in science? | Standardized test results |
| 6.3 What percent of students are above, at, and below national norms on standardizational tests in social studies? | Standardized test results |

CITIZENSHIP

Questions:

- 1.1 What percent of the students achieve a satisfactory level on tests of civic understanding?
- 2.1 What percent of those eligible register to vote? What percent do vote?
- 2.2 What percent of students have opportunities to participate in civic enterprises?

Sources of data:

- | |
|----------------------------|
| Standardized test results |
| Florida Secretary of State |
| Accreditation reports |
| State and local studies |

- | | |
|---|---|
| 2.3 What percent of students participate in school improvement projects (both paid and unpaid)? | <p>Neighborhood Youth Corps</p> <p>State and local vocational education agencies</p> <p>Accreditation reports</p> |
| 2.4 What percent of the population participate in voluntary civic action organizations? | National, State, and local agencies |
| 2.5 What opportunities are provided for student participation in policy development? | Accreditation reports |
| 3.1 What is the student's attitude toward other ethnic groups? | <p>USOE, OEO</p> <p>National Civil Rights Commission</p> |
| 3.3 What school organizational and curriculum policies assist integration? | National Civil Rights Commission |
| 3.4 To what extent do communities support the United Fund and other voluntary welfare programs? | <p>Federal, State, and local government agencies</p> <p>Chamber of Commerce</p> |
| 4.1 What percent of the population violates laws and regulations? | <p>Public Safety Agencies</p> <p>Internal Revenue Service</p> <p>National, State, and local studies</p> |

- | | |
|--|--|
| 4.2 What courses and units of instruction are focused on citizenship responsibilities? | Accreditation reports
State and local studies |
| 4.3 To what extent do in-school pupils comply with school rules and regulations? | Attendance reports
State and local studies |

VOCATIONAL INTEREST

Questions:

- 4.1 What courses or units for vocational orientation are offered? Grade levels? Enrollment?
- 4.2 Is vocational orientation correlated with general education?
- 4.3 What exploratory courses are offered in junior high schools?
- 4.4 What opportunities for vocational counseling are available and are all students receiving such counseling?
- 4.5 Are vocational course offerings of such a nature that salable skills are being developed?

Sources of data:

State Department
Vocational and Vocational Rehabilitation
Division

County school offices

State Department
Vocational Division

County school offices

State Department
Vocational Division

County offices

State Department
Vocational Division

State Guidance
Service

State Department
Vocational Division

Personnel offices of
industry and business

5.1 How long does the employee remain in one vocation?

State Department
Labor Statistics

MENTAL AND PHYSICAL HEALTH

Questions:

7.1 What is the incidence of malnutrition, anemia, hookworm, obesity, etc.?

Sources of data:

Federal, State, and
county records

8.1 What is the ratio of mentally retarded, partially sighted, etc. to the total population?

State Department of
Education

9.2 How many certified teachers of health education are employed in schools?

State Department of
Education

10.1 What percent of students at various grade levels, by sex, race, rural urban, and school size, exhibit appropriate physical fitness?

Physical fitness
administered by State
Department of Edu-
cation

11.2 What percentage of schools offers health education? Grade levels? Enrollment?

State Department of
Education

HOME AND FAMILY LIVING

Question:

1.3 What percentage of children is classified as delinquents?

Sources of data:

State Division of Youth
Services

1.4 What percentage of girls 18 years old and younger is unwed mothers?

State Board of Health

- | | |
|--|--|
| 2.4 What percentage of families owns their home and what percentage rents their home? | Bureau of Economic and Business Research, U. of F. |
| 2.5 What percentage of families is certified by school system for participation in Title I programs? | County School Boards |
| 2.6 What percentage of families is on welfare? | State Board of Welfare |

AESTHETIC AND CULTURAL APPRECIATION

Questions:

- 1.1 What library facilities and services are available?

Sources of data:

State Department of Education

State Library Association

State Library Board

County school offices

- 1.2 What use is made of library facilities and services, public and school?

State Department of Education

State Library Association

State Library Board

County school offices

- 1.4 What is the extent of use of historical sites?

Historical Society

Chamber of Commerce

2.4 How available is instruction in the arts and humanities in the schools?	State Department of Education County school offices
2.5 What percent of students is enrolled in the arts and humanities courses?	State Department records County school offices
3.1 What are the unique natural resources in Florida?	State Dept. of Conservation State Park Board Commission of Fish and Wildlife
3.3 What courses or units of instruction relate to resource-use education?	Title III Conservation projects

B. Opinion

The purpose of this phase of the study is to gather information about the opinions which selected groups of people hold about some facets of public education. This information will supplement that which is collected in the execution of phases I and III of the project.

Sample

The following groups must be represented in an overall sample or a sample should be drawn for each of: citizens (adult), parents of in-school children, public school administrators, public school teachers, public school students, employers of public school students who are enrolled in work experience programs, employers of former public school students, school board members,

and former students who were taught a second language and subsequently traveled in foreign countries.

The samples of students, teachers, administrators, parents, citizens, and others should be drawn so that each sample will contain enough elements from (a) each sex, (b) white and nonwhite races, (c) rural and urban residence, and (d) school size (where relevant) to enable making differential statements about segments of each major category in the sample.

The decision about whether to draw these samples on a statewide basis or to draw them from the geographical areas of the "study schools" of phase III must be delayed until it is determined whether the aggregate of the "study schools" and their supporting geographic area and constituency can be construed as representing the state, and until it is determined whether the opinion survey data are to be analyzed in conjunction with other information about the same populations collected as part of phase III.

Questionnaires should be constructed for each group listed below and should contain items which assess the topics which are named below. In addition, each questionnaire should contain identification items which will enable categorizing the respondent according to his race, rural urban residence, sex, age, length of residence in Florida, educational level and family income.

Topics for Opinion Assessment

3-A: This section presents the topics about which opinions are to be sought and identifies the desired respondents to each topic.

It should be noted that although questionnaire-like items are listed, the intention was that these items be suggestive of topics which should be assessed. The items are not offered for inclusion in a questionnaire.

Responding Group						Question Related To	Question
Citizens	Parents	Administrators	Teachers	Pupils	Others		
					1 2	Communication 2.4	How useful is second language which was taught in school?
			X	X		Communication 3.6	What use is made of questions, interaction, interview techniques by in-school and out-of-school populations?
	X		X			Communication 4.4	How well do students resist irrational solutions to problems?
		X	X	X		Communication 4.5	Is the school day organized to encourage individual problem solving in all areas of learning?
	X			X		Citizenship 3.1	What is the student's attitude toward other ethnic groups?
X						Citizenship 3.5	Does the citizen participate in the protection of rights of others?
X	X	X	X	X	3	Physical Health	Do citizens, parents, school board members, administrators, pupils approve and desire giving students instruction about sex, drugs, tobacco, alcohol?
					4	Vocational 6.1	How do employers view work-experience students as to their accuracy, dependability, and command of basic skills (3 R's)?

Responding Group						Question Related To	Question
Citizens	Parents	Administrators	Teachers	Pupils	Other		
X	X	X	X			Moral and Ethical values	1.1 Can patriotism be taught?
X	X	X	X				1.2 Does the school share a responsibility in teaching moral values?
X	X	X	X				1.3 What is morality?
X	X	X	X				1.4 How do moral attitudes of youth differ from those of preceding generations?
X	X	X	X				1.5 What is the generation gap?
X	X	X	X				1.6 What is moral significance of increasing crime rate?
X	X	X	X				2.1 Can something be ethical for one person and unethical for another?
X	X	X	X				3.1 Does the school teach respect for religious beliefs of others?
X	X	X	X				2.2 Are schools teaching pupils to work together?
X	X	X	X				1.7 Should schools teach personal values? If so, whose?
X	X	X	X				1.8 What is responsibility of school in teaching appreciation of beauty in music, art, literature?
X	X	X	X				1.9 What is responsibility of school in teaching righteousness?

Responding Group

Question

Citizens	Parents	Administrators	Teachers	Pupils	Employers of Graduates	Others		
	X							What quality of education is your child getting in Florida? Good ___ Poor ___ Fair ___
	X							How have you learned about your schools? a. Member PTA? b. Have ever attended school board meeting? c. When did you last visit your child's class? d. When did you last have conference with your child's teacher?
X	X	X	X	X	X	X	3	Do you believe minimum qualifications should be established for local school superintendent?
X	X	X	X	X	X	X	3	Do you believe minimum qualifications for school board members should be established?
X	X	X	X	X	X	X	3	Should teachers be involved in policy decisions? ___ At school level? ___ At county level?
X	X	X	X	X	X	X	3	Should major administrative decisions at school level be the responsibility of: ___ principal; ___ teachers; ___ principal in cooperation with teachers?
X	X	X	X	X	X	X	3	Should student opinion be considered when decisions are made? ___ yes; ___ no
X	X	X	X	X	X	X	3	Do you favor increased financial support for public schools?
X	X	X	X	X	X	X	3	Should the major source of increased funds be: ___ state; ___ federal; ___ local
X	X	X	X	X	X	X	3	Rate the quality of Florida schools on the following: Facilities <u>Excellent</u> <u>Good</u> <u>Unacceptable</u> Program _____ Staff: Teachers _____ Principals _____

Responding Group Question Related To Question

Citizens	Parents	Administrators	Teachers	Employer of Graduates	Other	Pupils		
X	X	X	X	X	3	X		Rate the quality of your local schools on the following: <u>Excellent</u> <u>Good</u> <u>Unacceptable</u> Facilities _____ Program _____ Staff: Teachers _____ Principals _____
	X							How well does the school adapt to the individual needs of your child? ____very well; ____fairly well; ____not at all
			X					Do teachers believe that a. their principals give constructive leadership in making needed changes b. their school boards support needed changes in curriculum and teaching methods c. parents support needed changes in curriculum and teaching methods d. the State Department exerts excessive influence on schools through prescribing tests, curricula, and instructional materials e. goals in their schools are clearly understood and accepted f. they have access to sources from outside and within the school system to assist in making needed changes in curriculum and teaching methods

1. Employers of students who had second language competency. Employment partially based on that competency due to its relation to job.
2. Students who had second language training while in school and subsequently traveled in foreign country where that language is spoken.
3. School Board Members
4. Employers of work experience students

SUGGESTIONS ABOUT OPINION STUDY AND ANALYSIS OF DATA

Decisions must be made about the conditions of executing the opinion survey and how the data should be analyzed. Our purpose here is to identify these decision points and to suggest possible solutions and the rationale of them.

A choice must be made between these alternatives: (a) to conduct the opinion survey on a statewide sampling basis, or (b) to conduct it in the particular geographical areas in which schools will be studied intensively as part of the overall study. It is recommended that the study be statewide in character to assure representativeness which would probably not be attainable through generalizing from data collected in particular and unrepresentative geographic areas.

A decision must be made about whether to (a) draw one sample which will include enough cases to permit drawing generalizations from the smallest subsample which will be included, or (b) to draw many samples, one for each group which is included. This problem arises because specific generalizations must be made about responses for these groups: citizens (adults), citizens who are parents of school age children, citizens who are school board members, school administrators, school teachers, students, and others. For each group data should be categorized according to the following classification variables when appropriate: sex, age, length of Florida residence, family income, race, rural-urban residence, and school size. It is recommended that this decision be made by experts in sampling survey and inferential statistics on the basis of feasibility and economy of data collection. It is also suggested that the entire "opinion survey" facet of the study be conducted by an independent and qualified firm whose personnel are highly trained and broadly experienced in conducting such studies.

It is further suggested that all units of the State Department of Education be invited to submit items for inclusion in the survey instruments and to criticize them prior to their administration. The former seems to be especially important because statewide surveys of opinions about education are infrequent, therefore this survey constitutes a singular opportunity to gather valuable data for many purposes in addition to the precipitative one.

If the opinion poll is conducted on a statewide basis, then State Department personnel should consider whether they wish to administer the statewide instruments to relevant groups at the

"school survey" site. The advantage in doing so would be the collection of complete data for the particular sites which would enable analyses of the extent to which the two sets of data interact.

C. SURVEY OF SCHOOL PRACTICES

A sample of schools would be selected so as to include populations representative of (1) inner city, suburban, small town, and rural schools; (2) different sizes of schools by levels: elementary, junior high, and senior high; (3) different ethnic groups; (4) migrants; (5) different geographic regions in the state; and (6) public and nonpublic schools.

A list of background data to be compiled for each school in the sample precedes the listing of questions.

Background Data for Schools in Sample

1. Breakdown of school population

- a. Subcultures: Negro, Cuban, Indian, Caucasian, migrant, rural, urban
- b. By income level of family (Title I)
- c. Family membership
- d. Employment of parents
- e. Age-grade distribution
- f. Holding power
- g. Classes of exceptionality

2. School personnel

- a. Certification status
- b. Number teaching in and out of field
- c. Turnover rate
- d. Teachers' background: residence, experience, age, sex
- e. Number in-school supportive personnel: guidance, health, materials, curriculum, administration

- f. Shared supportive personnel
- 3. School facilities
 - a. Number students per classroom
 - b. Single or double session
 - c. Special rooms: auditorium, lunchroom, library, gymnasium, etc.
 - d. Condition of facilities
 - e. Flexibility of instructional space for large groups, small groups, individual study
 - f. Grounds, play space
 - g. Safety factors
 - h. Heating, air conditioning, ventilation
 - i. Permanent and temporary space
- 4. Curriculum and Instruction
 - a. Program of studies
 - b. Organization of instructional groups
 - c. Pupil progress policies
 - d. Instructional aids
- 5. Organization
 - a. Gradedness - non gradedness
 - b. Horizontal organization
 - c. Staff organization
 - d. Schedule

A survey team would be chosen to include persons with recognized competences in the educational areas representing the perennial objectives on which the study is based. This team would be expected to collect its data on site and compile its report according to the items listed below (numeral before the decimal point refers to the behavior, and the second numeral to the question in the original list).

Communication and Learning Skills

- 1.3 What percent of pupils are above, at, or below national norms on standardized tests in reading and English?
- 1.4 What percent of dropouts are above, at, or below national age norms in reading and English?
- 1.6 How many who are not literate in English are literate in another language?
- 1.7 How and how well is English being taught as a second language?
- 2.3 What percent of school population is learning to communicate in a second language?
- 3.3 How extensively and effectively are library facilities in school being used?
- 3.4 How effectively are textbooks used?
- 3.5 Do teaching procedures encourage use of varied sources of information?
- 3.6 What use is made of questions, interaction, and interview techniques?
- 4.1 How do students perform on sections of standardized tests emphasizing application of facts, concepts, and processes?
- 4.2 How do students perform on tests of propaganda analysis, evaluation of sources, analysis of issues, etc.?
- 4.3 How do students go about decision-making in student government and other student directed activities?
- 4.4 How well do students resist irrational solutions to problems?

- 4.5 Is the school day organized to encourage individual problem solving in all areas of learning?
- 4.6 Do teachers use procedures which encourage application of rational processes to solution of problems?
- 5.1 What percent of the out of school population is enrolled in voluntary educational programs?
- 5.2 What percent of students enroll in summer schools and other activities, if any, not required by the school?
- 5.3 What percent of the population make use of supplementary educational programs such as museums, zoos, art galleries?
- 5.4 What percent of school dropouts later continue in educational programs?
- 5.7 What opportunities are available for student initiated learning in school?
- 6.1 What percent of students are above, at, and below national norms on standardized tests in mathematics?
- 6.2 What percent of students are above, at, and below national norms on standardized tests in science?
- 6.3 What percent of students are above, at, and below national norms on standardized tests in social studies?

Citizenship Education

- 1.1 What percent of students achieve at a satisfactory level on tests of civic understanding?
- 2.2 What percent of students have opportunities to participate in civic enterprises?

- 2.3 What percent of students participate in school improvement projects (paid and unpaid)?
- 2.5 What opportunities are provided for student participation in policy development?
- 3.2 What voluntary efforts are made to solve in-school problems of pluralism?
- 3.3 What school organizational and curriculum policies assist integration?
- 4.2 What courses and units of instruction are focused on citizenship responsibilities?

Vocational Interests

- 1.1 What percent of students at various grade levels stratified by race, sex, rural-urban, school size, and occupational goal, can demonstrate acceptable level of information on an examination concerning such subjects as job opportunities, sources of employment information, employment regulations and laws, economic and social conditions of employment?
- 2.1 What are students' attitudes toward work?
- 3.1 What percent of students at various grade levels, stratified by race, sex, rural-urban, school size, and occupational goal, can demonstrate acceptable level of information on an examination concerning educational requirements of jobs?
- 4.1 What courses or units for vocational orientation are offered? Grade levels? Enrollment?
- 4.2 Is vocational orientation correlated with general education program?
- 4.3 What exploratory courses are offered in junior high schools?
- 4.4 Are vocational course offerings of such nature that salable skills are being developed?

- 4.5 What opportunities for vocational counseling are available and are all students receiving such counseling?

Mental and Physical Health

- 1-6.1 On a standardized adjustment inventory, what percent of students at various grade levels, stratified by sex, rural-urban residence, school size, and race exhibit the behaviors listed as 1-6?
- 9.1 What percent of students at 12th grade level, stratified by sex, urban-rural, school size, exhibit satisfactory knowledge of health services in their community?
- 10.1 What percent of students at various grade levels, by sex, race, rural-urban, and school size, exhibit appropriate physical fitness?
- 11.1 What percent of students at various grade levels, by sex, race, rural-urban, and school size, recognize health hazards?
- 11.2 What percent of schools offer health education? Grade levels? Enrollment?

Home and Family Relationships

- 1.1 What courses or units of instruction are provided at what grade levels relating to sex education? Enrollment?
- 1.2 What courses or units of instruction are provided at what grade levels relating to home and family living? Enrollment?
- 2.1 What provisions are made by the school to compensate for deficiencies in home and family backgrounds?
- 2.2 What opportunities are offered for parent education?

- 2.3 What special services are provided students to prevent or ameliorate delinquent behavior?

Aesthetic and Cultural Appreciation

- 1.1 What library facilities and services are available?

- 1.3 Is a museum accessible? What is extent of use by the school? What is cost of admission, if any?

- 1.4 What is the extent of use of historical sites?

- 2.1 What opportunities are offered for participation in sports, interscholastic and intramural?

- 2.2 What percent of students participate in sports, interscholastic and intramural?

- 2.3 What opportunities exist for observation of athletic events?

- 2.4 How available is instruction in the arts and humanities in the schools?

- 2.5 What percent of students are enrolled in arts and humanities courses?

- 2.6 What opportunities are provided for individual recreational activities which enhance a person's physical and mental health?

- 3.2 To what extent are local natural resources utilized by the schools?

- 3.3 What courses or units of instruction relate to resource use education?

- 4.1 What opportunities exist for interaction among individuals and groups of varying subcultures in and out of school?

D. Organization of the Data

Three kinds of data will be presented in the final report:

General Information, Accomplishment of Perennial Objectives, and Opinions about Education. The order of presentation should be as the kinds are stated above.

General Information. The topics included in this section will deal with population, society, economy and industry, and education. A subsection might be devoted to each of them. The data will be presented in tables, charts, and graphs. The textural material will briefly describe the data and present concise summaries of it. No interpretation or evaluation of the data will be presented in this section of the report; it will be presented subsequently in IV.

Whenever possible the information presented in this section should include temporal projections so the reader might gain insight into the recent development of the state and the probable future development.

The purpose of the information in this section is to give the reader a comprehensive conceptual background so that he will view in perspective the specific educational data which are presented in succeeding sections.

Accomplishment of Perennial Objectives. The data in this section will include that which came from general published sources and from specific projects which were conducted as part of the school survey and the opinion poll.

The organization of data should be as follows:

- (a) All data about each objective should be presented before another objective is considered; i.e., there will be seven major sections.
- (b) For a given objective, the data should be presented about each "school survey unit" separately and then in summary.
- (c) Within each objective and school site, the data should be presented according to each major subsidiary behavior and the specific questions which were asked to yield evidence about the accom-

plishment of it. Answers to these questions will be obtained from published summaries and specific studies which are conducted at the school sites.

- (d) Whenever appropriate, specific evidence should be presented in terms of whatever of the following identifying characteristics are relevant—sex, grade-level, rural-urban-inner city, and racial group.

Opinions about Education This section will contain data obtained by means of the statewide opinion poll. The questions could be organized in the following groups:

- (a) Effectiveness of schools
- (b) Susceptibility of schools to innovation
- (c) New courses of instruction

Each of these major categories might be reduced to subsidiary categories, e.g., "c" will certainly include units on morals and values, health education, sex education, occupational training, etc.

The data should be presented according to identification variables of respondents; age, sex, length of residence in Florida, rural-urban-inner city, family income, age and racial group.

Some data will be collected from different classes of respondents. These data should be presented according to category of respondent in a manner which will highlight whatever differences exist between categories.

EVALUATION OF CURRENT EDUCATIONAL PROGRAMS

After the data have been collected and organized then the organized data would be used to evaluate current educational

programs in Florida. This evaluation would be done in relation to at least four criteria. Other criteria would be added as a direct outcome of the collection and organization of the data.

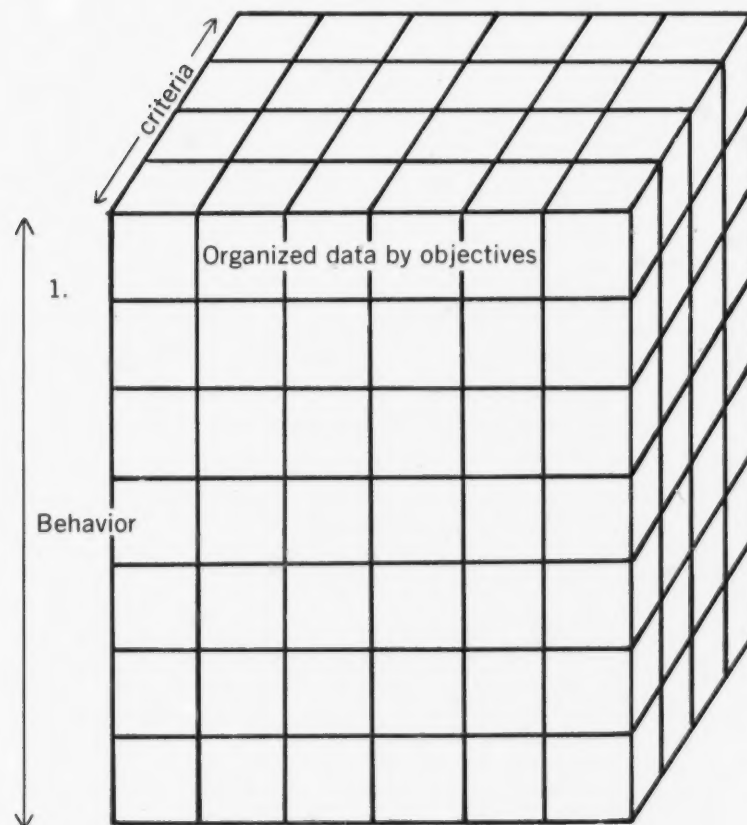
The four criteria which seem most important at the present time are:

- a. The relevance of educational programs for today and for Florida at certain future times
- b. The relevance of educational programs for sub-populations within the state.
 1. Cuban
 2. Caucasian
 3. Indian
 4. Negro
 5. Urban
 6. Rural
 7. Disadvantaged
 8. Combinations of sub-groups
- c. The effectiveness of educational programs in (1) providing for individual differences and (2) providing motivation and ability for self-directed learning.
- d. How Florida compares to other states

The evaluation would be done by a panel made up of the coordinator of the total study and his staff, staff representative of the survey team, staff representative of opinion poll, and an expert who would bring to the job an expertise directly related to one or more of these four criteria. This panel would include personnel from government, business and industry, and education. The panel would include such specialists as an economist, a sociologist, an anthropologist, a research analyst, a political scientist, a population analyst, and an educationist.

The evaluation would be done in relation to the behavior as these were described in section one of the study and as they are revised and refined in light of the analysis of the data collected.

A schema for undertaking the evaluation would be a look at educational programs in Florida according to the organized data by behavior and the priority criteria.



IV. DEFINING CRITICAL NEEDS

The evaluation panel described in III above would recommend from their evaluation conclusions the educational needs of Florida considered critical. The following criteria would be considered in determining criticality:

1. Extent of present deficiency in the state
2. Relative importance in achieving perennial objectives
3. Probable duration
4. Economic and political feasibility

V. OUTLINE OF TIME SCHEDULE

July-August, 1968:	Organize staff for II, A - (Data Review) Ar- rangements for II, B - (Opinion Poll) and II, C - (Survey)
September-December, 1968:	Collection and organi- zation of data in II, A, B, and C
January-February, 1969:	Evaluation (III) by the evaluation panel
March-	Preparations of recom- mendations as to criti- cal needs (IV) by the panel

Perennial Objectives, Behaviors, and Questions

I. Communication and Learning Skills

A. Reads, writes, speaks and listens in standard (acceptable) English

- 1.1 What percent of the people cannot gain satisfactory employment because of lack of communications skills?
- 1.2 What percent of draftees and volunteers are rejected by the armed services because of lack of communications skills?
- 1.3 What percent of pupils are above, at, and below national norms on standardized tests in reading and English?
- 1.4 What percent of drop-outs are above, at, and below national age norms in reading and English?
- 1.5 How is literacy distributed among population sub-groups?
- 1.6 How many who are not literate in English are literate in another language?
- 1.7 How and how well is English being taught as a second language?

B. Reads, writes, speaks and listens in a second language

- 2.1 What percent of the out-of-school population can communicate in a second language?
- 2.3 What percent of the school population is learning to communicate in a second language?
- 2.4 How useful is second language which was taught in school?

C. Uses effectively many sources of information in his learning activities

- 3.1 What percent of the population has libraries available? What percent uses them?
- 3.2 How does Florida compare in book sales, newspaper and magazine sales, and TV and radio audiences?
- 3.3 How extensively and effectively are library facilities in school being used?
- 3.4 How effectively are textbooks used?
- 3.5 Do teaching procedures encourage use of varied sources of information?
- 3.6 What use is made of questions, interaction, and interview techniques?

D. Applies rational processes in arriving at the solutions of problems

- 4.1 How do students perform on sections of standardized tests emphasizing application of facts, concepts, and processes?
- 4.2 How do students perform on tests of propaganda analysis, evaluation of sources, analysis of issues, etc.?
- 4.3 How do students go about decision-making in student government and other student directed activities?
- 4.4 How well do students resist irrational solutions to problems?
- 4.5 Is the school day organized to encourage individual problem-solving in all areas of learning?
- 4.6 Do teachers use procedures which encourage application of rational processes to solution of problems?
- 4.7 How competent is the out-of-school population to detect propaganda, evaluate sources, detect bias, and analyze issues?

E. Continues learning on his own initiative

5.1 What percent of the out-of-school population is enrolled in voluntary educational programs?

5.2 What percent of students enroll in summer schools and other activities, if any, not required by the school?

5.3 What percent of the population make use of supplementary educational programs such as zoos, museums, and art galleries?

5.4 What percent of drop-outs later continue in educational programs?

5.5 What percent of high school graduates continue formal education?

5.6 What opportunities are available for continued learning for the disadvantaged?

5.7 What opportunities are available for student-initiated learning in school?

F. Demonstrates understanding of the basic concepts of mathematics, science, and social studies

6.1 What percent of students are above, at, and below national norms on standardizational tests in mathematics?

6.2 What percent of students are above, at, and below national norms on standardizational tests in science?

6.3 What percent of students are above, at, and below national norms on standardizational tests in social studies?

II. Citizenship Education

A. Exhibits understanding of democratic processes

1.1 What percent of the students achieve a satisfactory level on tests of civic understanding?

B. Participates in civic enterprises

2.1 What percent of those eligible register to vote? What percent do vote?

2.2 What percent of students have opportunities to participate in civic enterprises?

2.3 What percent of students participate in school improvement projects (both paid and unpaid)?

2.4 What percent of the population participate in voluntary civic action organizations?

2.5 What opportunities are provided for student participation in policy development?

C. Exhibits concern for the welfare of others

3.1 What is the student's attitude toward other ethnic groups?

3.2 What voluntary efforts are made to solve in-school problems of pluralism?

3.3 What school organizational and curriculum policies assist integration?

3.4 To what extent do communities support the United Fund and other voluntary welfare programs?

3.5 Does the citizen participate in the protection of rights of others?

D. Discharges civic responsibilities (obeys laws, pays taxes, supports improvement of government)

4.1 What percent of the population violates laws and regulations?

4.2 What courses and units of instruction are focused on citizenship responsibilities?

4.3 To what extent do in-school pupils comply with school rules and regulations?

II. Vocational Interests

A. Exhibits knowledge of (a) broad expanse of job opportunities; (b) sources of employment information; (c) laws and regulations pertinent to employment; (d) economic and social conditions of employment

1.1 What percent of students at various grade levels stratified by race, sex, rural-urban, school size, and occupational goal, can demonstrate acceptable level of information on an examination concerning such subjects as job opportunities, sources of employment information, employment regulations and laws, economic and social conditions of employment?

B. Exhibits respect for all honorable occupations

2.1 What are students' attitudes toward work?

C. Chooses vocational interest appropriate to his aptitudes, abilities, and life goals

3.1 What percent of students at various grade levels, stratified by race, sex, rural-urban, school size, and occupational goal, can demonstrate acceptable level of information on an examination concerning educational requirements of jobs?

D. Chooses an educational program appropriate to vocational interests

4.1 What courses or units for vocational orientation are offered? Grade levels? Enrollment?

- 4.2 Is vocational orientation correlated with general education program?
- 4.3 What exploratory courses are offered in junior high schools?
- 4.4 Are vocational course offerings of such nature that salable skills are being developed?
- 4.5 What opportunities for vocational counseling are available and are all students receiving such counseling?
- E. Remains in occupation and job for reasonable periods
 - 5.1 How long does the employee remain in one vocation?
- F. Exhibits accuracy, dependability, and command of basic skills in work experience
 - 6.1 How do employers view work-experience students as to their accuracy, dependability, and command of basic skills? (3 r's)?

IV. Mental and Physical Health

- A. Exhibits objective judgment concerning ordinary life situations
- B. Exhibits self-actuating behavior in daily events
- C. Reacts to events with appropriate emotional demonstrations
- D. Works hard and purposefully to optimum levels
- E. Accepts self honestly and objectively
- F. Respects beliefs and actions of others
 - 6.1 On a standardized adjustment inventory, what per-

cent of students at various grade levels, stratified by sex, rural-urban residence, school size, and race exhibit the behaviors listed as 1-6?

G. Remains relatively free of preventable disease and illness

7.1 What is the incidence of malnutrition, anemia, hookworm, obesity, etc.?

H. Meets minimal health standards for occupational and educational enterprises

8.1 What is the ratio of mentally retarded, partially sighted, etc. to the total population?

I. Exhibits knowledge of health services in his community

9.1 What percent of students at 12th grade level, stratified by sex, urban-rural, school size, exhibit satisfactory knowledge of health services in their community?

9.2 How many certified teachers of health education are employed in schools?

J. Exhibits appropriate physical and mental vigor

10.1 What percent of students at various grade levels, by sex, race, rural-urban, and school size, exhibit appropriate physical fitness?

K. Recognizes health hazards

11.1 What percent of students at various grade levels, by sex, race, rural-urban, and school size, recognize health hazards?

11.2 What percent of schools offer health education? Grade levels? Enrollment?

V. Home and Family Relationships

A. Respects the role of the American family in American society

1.1 What courses or units of instruction are provided at what grade levels relating to sex education? Enrollment?

1.2 What courses or units of instruction are provided at what grade levels relating to home and family living? Enrollment?

1.3 What percentage of children is classified as delinquents?

1.4 What percentage of girls 18 years old and younger is unwed mothers?

B. Seeks to maintain for the family an economic level at or above an acceptable minimum (as defined in the poverty program)

2.1 What provisions are made by the school to compensate for deficiencies in home and family backgrounds?

2.2 What opportunities are offered for parent education?

2.3 What special services are provided students to prevent or ameliorate delinquent behavior?

2.4 What percentage of families owns their homes and what percentage rents their homes?

2.5 What percentage of families is certified by school system for participation in Title I programs?

2.6 What percentage of families is on welfare?

VI. Aesthetic and Cultural Appreciations

A. Uses systematically collected and preserved resource

materials to promote cultural and aesthetic appreciation
(libraries, museums, historical sites)

1.1 What library facilities and services are available?

1.2 What use is made of library facilities and services,
public and school?

1.3 Is a museum accessible? What is extent of use by
the school? What is cost of admission, if any?

1.4 What is the extent of use of historical sites?

B. Participates in and/or observes the performing arts and
sports

2.1 What opportunities are offered for participation in
sports, interscholastic and intramural?

2.2 What percent of students participate in sports,
interscholastic and intramural?

2.3 What opportunities exist for observation of athletic
events?

2.4 How available is instruction in the arts and humanities
in the schools?

2.5 What percent of students is enrolled in the arts and
humanities courses?

2.6 What opportunities are provided for individual recrea-
tional activities which enhance a person's physical and
mental health?

C. Appreciates and utilizes the natural resources of the state

3.1 What are the unique natural resources in Florida?

3.2 To what extent are local natural resources utilized
by the schools?

3.3 What courses or units of instruction relate to resource
use education?

D. Interacts positively with individuals of other cultures or sub-cultures

4.1 What opportunities exist for interaction among individuals and groups of varying subcultures in and out of school?

VII. Moral and Ethical Values

A. Exhibits respect for such values as beauty, righteousness, love of country, respect for the rights of others

1.1 Can patriotism be taught?

1.2 Does the school share a responsibility in teaching moral values?

1.3 What is morality?

1.4 How do moral attitudes of youth differ from those of preceding generations?

1.5 What is the generation gap?

1.6 What is moral significance of increasing crime rate?

1.7 Should schools teach personal values? If so, whose?

1.8 What is responsibility of school in teaching appreciation of beauty in music, art, literature?

1.9 What is responsibility of school in teaching righteousness?

B. Relates to others effectively

2.1 Can something be ethical for one person and unethical for another?

2.2 Are schools teaching pupils to work together?

C. Respects the religious beliefs of others

3.1 Does the school teach respect for religious beliefs of others?

APPENDIX B

FERDC TASK FORCE MEMBERS

Acting upon an invitation from the Florida State Department of Education, the Florida Educational Research and Development Council organized a task force to develop a plan for study of the educational needs of Florida. This group met for a preliminary session on May 22 and worked from June 2-5 continuously on developing a design for this study. The group accepted the challenge to be creative in developing a plan for the identification of the educational needs. The task force membership was drawn from public and private schools, public and private universities, the State Department of Education, and the U.S. Office of Education.

The members of the task force were:

Dr. A. A. Abrahams Florida A&M University Tallahassee, Florida	Mr. Leo Howell Florida Department of Education Tallahassee, Florida
Dr. William M. Alexander University of Florida Gainesville, Florida	Dr. Russell Kropp Florida State University Tallahassee, Florida
Dr. Joyce Cooper University of Florida Gainesville, Florida	Dr. A. A. Robinson, Principal Raines High School Jacksonville, Florida
Dr. Joseph Crenshaw Florida Department of Education Tallahassee, Florida	Dr. Leon Sims Florida Department of Education Tallahassee, Florida
Dr. Joseph Fordyce, President Santa Fe Jr. College Gainesville, Florida	Mr. Jon Stapleton Florida Department of Education Tallahassee, Florida
Dr. Ralph Hall Dade County Public Instruction	Dr. Richard Stewart Indian River Regional Educational Development Council Vero Beach, Florida
Major Dewitt Hooker, Exec. Sect. Fla. Independent School Ass'n.	

Dr. James R. Swanson
Florida Department of Education
Tallahassee, Florida

Dr. Ellen Thiel
Florida State University
Tallahassee, Florida

Dr. Mitchell Wade
Florida Department of Education
Tallahassee, Florida

Dr. Herbert Wey
University of Miami
Miami, Florida

Dr. Al White
U.S. Office of Education
Washington, D.C.

Dr. J. B. White, Exec. Sect., FERDC
University of Florida
Gainesville, Florida

APPENDIX C

DATA REVIEW AND EVALUATION COMMITTEES

I. Data Review

Dr. Howard Stoker
Professor of Education
Department of Research and Testing
Florida State University
Tallahassee, Florida

Dr. Ronald M. Pavalko
Professor of Sociology
Florida State University
Tallahassee, Florida

Dr. Benjamin Hodgkins
Professor of Sociology
Florida State University
Tallahassee, Florida

II. Data Evaluation

Dr. Ralph Hall
Director, Educational Programming
Planning and Development
Dade County School System
1410 N.E. Second Avenue
Miami, Florida

Dr. Hazen Curtis
Professor of Education
Florida State University
Tallahassee, Florida

Dr. William Alexander
Professor of Education
College of Education
University of Florida
Gainesville, Florida

Dr. I. M. Wade
Chief, Bureau of Research
Department of Education
Tallahassee, Florida

Mr. H. J. Waters
Coordinator of Planning
Department of Education
Tallahassee, Florida

Mr. Ed R. Allen
Research Associate
Department of Education
Tallahassee, Florida

Mr. Leo H. Howell, Jr.
State Coordinator, Title III, ESEA
Department of Education
Tallahassee, Florida

Dr. Ronald M. Pavalko
Professor of Sociology
Florida State University
Tallahassee, Florida

Dr. J. B. White
Executive Secretary
Florida Educational Research
and Development Council
604 Lake Shore Towers
Gainesville, Florida

Mr. Shouppe Howell
Consultant in Curriculum
ESEA III PAEC Center
412 S. Boulevard
Chipley, Florida

Dr. James C. Impara
Research Associate
Department of Education
Tallahassee, Florida

Dr. Joseph W. Crenshaw
Bureau Chief, Curriculum
and Instruction
Department of Education
Tallahassee, Florida

Mr. William Cecil Golden
Associate Commissioner
for Planning and Coordination
Department of Education
Tallahassee, Florida